

Rethinking lay people's theories of the economy

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Abstract

Renewed scholarly interest in lay people's economics (Leiser & Kril, 2017; Darriet & Bourgeois-Gironde, 2015; Sapienza & Zingales, 2013a; Dixon, Griffiths, & Lim, 2014), a tradition of research typically associated with economists and economic psychologists (Furnham, 1988; Williamson & Wearing, 1996; Blendon et al., 1997; Caplan, 2001; Leiser & Aroch, 2009), can be situated alongside recent public debate about economics, economists' expertise and the role of economists and lay people in democratic decision-making (for example, see: Earle, Moran, & Ward-Perkins, 2017). This thesis contributes to our understanding of lay people's theories of the economy by interrogating, challenging and addressing key assumptions underpinning this tradition of research. I approached this research from a cross-disciplinary perspective. The thesis is situated at the intersection of critical political psychology (Tileagă, 2013) and corpus linguistics (Partington, 2013).

I examine two key assumptions that are common in the economic and psychological literature on lay people's economic thinking. These assumptions are often uncritically reproduced in studies of lay people's thinking about the economy. The first of these is an assumption from a disciplinary perspective, which I term *from the Academy*, that privileges the expert economist as the correct reference for understanding and studying lay people's thinking (for example, see: Caplan, 2006). The second assumption treats lay theories as something to be conceived and researched as primarily individual-level cognitive phenomena, which I term *in the head* (for example, see: Williamson & Wearing, 1996). I argue that these assumptions reflect and reproduce a depoliticised account of economics that neglects the public nature of economic thinking.

In contrast to the traditional approaches noted above, I propose an analytic reorientation, drawing on rhetorical psychology (Billig, 1987, 1991), that reconceptualises lay people's theories as action oriented to a context of ongoing public debate. While psychologists have raised the importance

of the context of public debate (Vergès, 1987; Furnham, 1988; van Bavel, 2000; Leiser & Kril, 2017), no work has previously made this context the focus of enquiry. I proposed to make the public use of the word *economy* the object of enquiry and study the rhetorical use of *economy* “in the wild” (Finlayson, 2007, p. 552). The word *economy* is “economic”, but also has a history of use in the public sphere (Mitchell, 2005; Schabas, 2009).

I used a “corpus-assisted” approach (Partington, 2004, 2013) to study patterns of language use in large corpora featuring many examples of people using the word *economy*. I conducted two studies that explored and identified common features of contemporary public rhetoric related to use of *economy* in New Zealand in distinct settings: New Zealand’s parliament and talkback radio calls. There are multiple methodological contributions related to the use of corpus methods. Firstly, I advanced an argument for the relevance of corpus methods for rhetorical psychological enquiry and exemplified this “in the wild” approach through the two studies. Secondly, in each of the studies I developed and deployed original software-driven processes to create and analyse large corpora that are important contributions of the thesis. In the first study, I examined the use of *economy* in New Zealand’s parliament by building a 57-million-word annotated corpus based on the *New Zealand Parliamentary Debates* (or *Hansard*) and developed a new analytic method, *key collocates analysis*, to detect meaningful shifts in the rhetoric of political parties related to the economy during the period between 2003 to 2016. In the second study, I examined the use of *economy* by people speaking on talkback calls on 1788 hours of talk radio in 2016. This study developed and demonstrated a novel computer-assisted approach using speech recognition software to identify keywords within an untranscribed corpus of audio recordings and an approach to analysis that was analogous to qualitative and quantitative analysis used in text-based corpus analysis.

The thesis contributes to knowledge about lay people’s economic thinking. The overall framework I developed, contrasts the *from the Academy* and *in the head* assumptions with an “in the wild” perspective, and offers new insights into existing work by economists and psychologists. In contrast to past research, this thesis demonstrates the deeply political nature of economic ideas in practice. Studying the rhetoric of the economy revealed and quantified dominant ways of representing

the economy involving ideas about nation, government and growth that have been neglected in previous research on lay economics. Both political elites and people speaking on talkback calls were orienting to the ever-present role of government and used the economy as an appeal to the collective prosperity and welfare. This thesis also found evidence of a disconnect between the thinking of political leaders and the public regarding the key concept of growth. For political elites, assumptions about growth were pervasive in the way they represented the economy. In contrast, rather than appealing to assumptions about growth, people on talkback were critically orienting to the economy, emphasising they were implicated in the economy and elaborating it as a qualitative and problematic entity. Rather than finding ignorant or deficient thinkers, this research demonstrates people drawing on and critically engaging with dominant economic ideas and able to relate these to the debates of their political community. The findings underscore the necessity to attend to the context of political ideas and arguments when researching lay people's economic thinking.

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Chapter 1 Introducing the need to rethink lay people's theories of the economy

1.1 Introduction

Economic policy is the primary activity of the modern state, making voter beliefs about economics among the most – if not *the* most – politically relevant beliefs. If voters base their policy preferences on deeply mistaken models of the economy, government is likely to perform its bread-and-butter function poorly.

(Caplan, 2006, p. 10)

In the quote above Caplan argues that lay people's "models of the economy" matter because they affect the political community. Scholars reflecting on lay people's thinking about the economy have frequently presented lay people's "mistaken" or otherwise challenged beliefs, understanding or thinking as a political problem (for example, see: Rubin, 2003; Leiser & Kril, 2017). Studying, what I refer to as, lay people's theories of the economy is studying *how the public thinks about the economy*, including *what it is, how it works, and why it works*. Research on lay people's thinking about the economic domain has historically been conducted by economists and psychologists (Furnham, 1988; Williamson & Wearing, 1996; Blendon et al., 1997; Caplan, 2001; Leiser & Aroch, 2009) and there has been recent renewed scholarly interest in this area (Leiser & Kril, 2017; Darriet & Bourgeois-Gironde, 2015; Sapienza & Zingales, 2013a; Dixon et al., 2014).

This renewed academic interest can be situated alongside prominent public questioning of economics, economists' expertise and the role of economists in relation to financial and debt crises (see: Fullbrook, 2010 and Section 1.2). Others have challenged the privileged position of economic experts, as the public express increasing disquiet about the growth of inequality and ecological problems (for example, see: Francesco I, 2015) and the lack of democratic decision-making (for example, see: Earle et al., 2017). In addition, there have been conspicuous examples of debate about

the public's "ignorance" and lack of deference to economic expertise (for an example of commentary on the Brexit debate in the United Kingdom, see: Fox, 2016).

Against this backdrop of academic interest and public debate, in this thesis I interrogate and challenge key assumptions that are common in the literature about lay people's economics. I propose an analytic reorientation, drawing on rhetorical psychology (Billig, 1987, 1991; Condor, Tileagă, & Billig, 2013; Gibson, 2015), that conceptualises lay people's theories as action oriented to a context of ongoing public debate. This reorientation requires that we take seriously the rhetoric of the economy "in the wild" (Finlayson, 2007, p. 552). By this I mean that we need to connect public thinking about the economy to the context of public debate. I used a "corpus-assisted" approach (Partington, 2004, 2013) to analyse contemporary public rhetoric related to the economy in New Zealand in two settings: debates between political parties in New Zealand's parliament; discussions on talkback radio calls. This analysis provides a critical lens with which to rethink lay people's theories of the economy.

1.2 Situating this research

Research that addresses how lay people think about the economy is both timely and relevant, reflecting both academic and public interest. Substantive research on lay people and their thinking about economic phenomena dates back over half a century in the work of George Katona (1960), but research has been disconnected in terms of research aims, theoretical perspectives, and terminology (Routh, 1999). Recently though, there has been increasing scholarly attention to lay people and their economics (Leiser & Kril, 2017; Darriet & Bourgeois-Gironde, 2015; Sapienza & Zingales, 2013a; Dixon et al., 2014). In this section I articulate the two broad research problems that have prompted previous research and situate my research in relation to these concerns. I then discuss how my research relates and responds to contemporary public debates about economics and economic expertise.

Although there is a tradition of wider interest from economists and psychologists, lay people's economics has become a disciplinary interest of economic psychology. In a recent economic psychology text the introductory chapter defined economic psychology as "the science of economic

mental life and behaviour” (Ranyard & Ferreira, 2017, p. 4) and grouped the chapter by Leiser and Kril (2017) “How Laypeople Understand the Economy” within an overarching concern with “economic mental representations” (Ranyard & Ferreira, 2017, p. 11).

However, while much of the research on lay people and how they think about the economic domain could be situated within economic psychology’s concern with “economic mental life”, research on lay people’s economics has also attracted interest more broadly from economists and psychologists who have tended to focus on two broad research problems:

1. To identify and explain the nature of the gap in knowledge, beliefs and decision-making styles between lay people and economic experts and to explore the consequences of this gap (for example, see: Blendon et al., 1997; Caplan, 2001; Sapienza & Zingales, 2013a);
2. To describe and explain the content of lay people’s beliefs, attitude, explanations, theories and cognitive models in the economic domain (see, for example: Furnham, 1988; Williamson & Wearing, 1996; Bastounis, Leiser, & Roland-Lévy, 2004; Vergès & Ryba, 2012).

Perhaps understandably given their professional interest, economists have tended to orient to the first of these areas of research areas (for example, see: Blendon et al., 1997; Caplan, 2001; Sapienza & Zingales, 2013a). However, this is more than professional curiosity about the public’s understanding of their expert domain. As the quote from Caplan (2006) suggests, economists have generally expressed their concerns about problematic public thinking “running amok” and influencing political decisions. Research on the second research problem has been primarily undertaken by psychologists (see, for example: Furnham, 1988; Williamson & Wearing, 1996; Bastounis et al., 2004; Vergès & Ryba, 2012).¹ Again, this research also routinely problematises differences between expert economists and lay people for democratic decision-making (for example, see: Leiser & Kril, 2017). Although I am addressing and integrating insights from the wider literature, my research aligns most closely with the second of these orientations. More specifically, I am focusing on lay people’s

¹ It should be noted that there is also a body of literature that attempts to explain how people “develop an understanding of the economic world” (Roland-Lévy, 1999, p. 175; Webley, 2005). As Carmela Aprea (2015, p. 14) has recently argued, this research has tended to focus on children and specific concepts, often with some concrete or behavioural manifestation (for example, money, banks or buying and selling) rather than students in their later years of secondary school and “less tangible and more abstract macro phenomena”.

theories related to *the economy*, the concern of a much smaller set of studies (Williamson & Wearing, 1996; van Bavel, 2000; Vergès & Bastounis, 2001).

This research can also be situated within contemporary public debates related to economics and economic expertise. This is most obviously evident in the public appetite to understand the causes and aftermath of the global financial crisis. By no means representative, but representing the public questioning of economists in relation to the causes of the financial crisis was the British Queen's reported question to an economist: "How come nobody could foresee it?", which provoked a three page letter of explanation from the British Academy (Stewart, 2009). This polite questioning of economists' failings by the Queen can be contrasted with more scathing criticisms of economics and economists in relation to the financial crisis. Fullbrook (2010, p. 90), who remarked on the "radical and widespread decline in its public credibility" of economists, lists 26 critical headlines that appeared in high-profile newspapers and magazines in 2009 and 2010, including "How Did Economists Get It So Wrong?" in the *New York Times*, "Will Economists Escape a Whipping" in *Atlantic Magazine*, "Sweep economists off their throne" in *Financial Times* (pp. 90-91).

While disagreeing over the responsibility of economists, reformers and defenders of the economics profession alike have acknowledged the poor perception of economic expertise following the crisis and this has led to some soul-searching and questioning close to the profession on how to react to the crisis (DeMartino, 2011; Coyle, 2010). There are two interesting developments in relation to this I will highlight. Firstly, the crisis has been the catalyst for university students to organise with a focus on reforming the economics curriculum and economics itself (Inman, 2013).² In 2014, the International Student Initiative for Pluralism in Economics, with backing from 47 of these student groups from around the world, released an open letter, which began: "It is not only the world economy that is in crisis. The teaching of economics is in crisis too, and this crisis has consequences far beyond the university walls" (International Student Initiative for Pluralism in Economics, 2014). As much as anything concrete that this movement has achieved in reforming how economics is

² Student-led calls for reform of economics and the economics curriculum pre-date the financial crisis. For example, the "post-autistic economics movement" was instigated by French students in 2000 (Fullbrook, 2003).

taught, this indicates a cohort of future economists and economic thinkers whose critical perspective on the discipline has been shaped by public questioning of the economics profession. In turn, student criticism of the economics curriculum has become a feature of this public questioning.

Secondly, there has been increasing interest in the potential of theoretical innovation, and particularly in incorporating psychological insights, predominantly via behavioural economics, to renew economic theory (Davies, 2015; Ranyard & Ferreira, 2017). There is a shared tradition of research in economic psychology and behavioural economics that is critical of the psychological assumptions embedded in economists' models and an obvious desire from protagonists that this research should inform mainstream economics (Wärneryd, 1988; Ranyard & Ferreira, 2017). There has been increasing receptiveness to these ideas from the centre of economics. A book by prominent economists Akerlof and Shiller (2009, p. 1) has advocated for a psychologically-informed macroeconomics, claiming that: "To understand how economies work and how we can manage them and prosper, we must pay attention to the thought patterns that animate people's ideas and feelings, their *animal spirits*".³ Perhaps most notably, this has been indicated by granting Richard Thaler, a behavioural economist, the Nobel prize for economics in 2017.

However, the financial crisis is just one of a broad range of problems provoking public challenges to economists and their ideas. Pope Francis' 2015 papal encyclical *Laudato Si'* discussed the problems of financial crisis, debt, inequality, environmental problems and climate change in relation to failings of prevailing economic ideas and extended a "call to seek other ways of understanding the economy and progress" (Francesco I, 2015, ¶ 16). This conspicuous critique echoes recent conspicuous discussion of economics, economists and the taken-for-grantedness of economics-as-usual in relation to the debt crises in Europe (Varoufakis, 2017) and, with the Occupy protests of 2011 in the background, the neglect of inequality (Piketty, 2014). But, even before these recent events, there have been long-running criticisms of an economics orthodoxy that has neglected crisis,

³ Here Akerlof and Shiller (2009, p. 14) revive John Maynard Keynes' use of "animal spirits" to refer to the role of psychological dynamics of economic behaviour in *The General Theory* (Keynes, 1936). Akerlof and Shiller argue that these dynamics were neglected by the followers of Keynes when they formalised his ideas into mathematical models of the macroeconomy.

debt and the financial sector (for example, see: Keen, 2011; Pettifor, 2006) and ecological problems and wellbeing (for example, see: Daly, 1974; Waring, 1999; T. Jackson, 2009).

Finally, and more directly related to the current research, there has been recent prominent examples of public commentary and debate specifically related to economists and lay people and the apparent disconnect between them. In three key instances during the writing of this thesis, large groups of economists publicly aligned themselves with one side of electoral decisions and large proportions of the public voted against the positions advocated by the economists. This included:

- “246 professors at Economics Schools and Universities in Greece” advocating for a “Yes” vote in the Greek “bailout” referendum in 2015 (Declaration of Professors of Economics at Greek Universities on the Referendum, 2015);
- “171 academic and 25 non-academic economists” advocated against leaving the European Union in the Brexit referendum in the United Kingdom in 2016 (Aldrick, 2016);
- “370 economists, including eight Nobel laureates in economics” advocating for a vote against Donald Trump in the US election in 2017 (Timiraos, 2016).

In each of these cases economists publicly advocated for the side that lost the electoral contest. Debate about rejection of economic expertise was most obvious in the case of the Brexit referendum. A Leave campaign leader, in a well-publicised rejection of economists, stated that “people in this country have had enough of experts” (Mance, 2016). There has been subsequent debate in leading media about an era of “post-truth politics”, which includes discussion of the rejection of expertise and particularly economic expertise (for example, see: Fox, 2016; Davies, 2016). In rethinking lay people’s theories of the economy, this thesis speaks to a context in which the gap between the thinking of expert economists and lay people has become both highly relevant and highly politicised.

1.3 The problem motivating this research

In this thesis, I argue that *previous academic research has not sufficiently interrogated or addressed key assumptions underpinning their research on lay people’s theories of the economy*. To illustrate,

we can now revisit Caplan's claim (quoted at the beginning of this chapter), which I suggest exemplifies problems in previous research on lay people's "economics". Caplan (2006) suggests that lay people's problematic thinking about economics has potential negative political effects. There is an implied lament in Caplan's argument: If only lay people thought like economists. Or perhaps, if only governments thought more like economists. In either view, lay people's thinking about the economy is separable from politics, psychologically compartmentalised (or perhaps departmentalised) in the same way academic disciplines are. Also implied in this conceptualisation is an assumption about an ideal causal path: Economic ideas are pre-political, the politically neutral data that is prerequisite for effective reasoning about politics. With the correct economics the answers to the dilemmas of the polity are self-evident. But, this depiction of the way people think about the economy is not a satisfying one. If economics and politics are not so easily separable then we have the beginning of a different conception of lay people's theories of the economy.

It might seem obvious that someone writing a thesis in a political science department might suggest that economists and psychologists are getting their politics wrong. But, this is not primarily a disciplinary claim and I am not attempting to replace one disciplinary lens with another. In fact, this claim emerges from critical engagement with a literature typically associated with economists and economic psychologists and draws on ideas from critical psychologists and other social scientists. I suggest that a *social scientific* understanding requires a rethink of how we conceptualise and study lay people's theories of the economy.

1.4 Aim and scope

Given the statement of the problem, I can now introduce the aim of this research. *The aim of this thesis is to contribute to our understanding of lay people's theories of the economy by interrogating, challenging and addressing key assumptions underpinning previous research.* Put more simply, I am rethinking lay people's theories of the economy.

In presenting the problem motivating this research I indicated that this enquiry was interdisciplinary and cross-disciplinary in nature. To make this clearer now, this work is a cross-

disciplinary engagement with research typically associated with economists and economic psychologists who study lay people's economic thinking. To be more specific about the way I will interrogate, challenge and address key assumptions underpinning previous research, *I situate this research within the intersection of critical political psychology* (for recent discussion, see: Tileagă, 2013; Sensales & Dal Secco, 2014) *and corpus linguistics* (Partington, 2003; Baker, 2006; Partington, 2013). Each of these disciplines will be introduced in more detail below. Because of the cross-disciplinary and interdisciplinary nature of this work I will draw on a wide base of literature that is relevant to lay people's economic thinking, to provide the background to the two studies and to develop the theoretical and methodological approach.

It is necessary at this point to clarify the scope of this this cross-disciplinary engagement by marking out the relevant literature on *lay people's theories of the economy* and defining the component terms. Although there are a growing number of studies on lay people's theories in the economic domain, a challenge of this research area is that the relevant research is somewhat disconnected due to differences in terminology and perspectives. This is a problem referred to by Routh (1999) almost two decades ago. To illustrate, articles co-authored by one researcher have used the words "lay" (Leiser & Aroch, 2009), "naïve" (Leiser & Drori, 2005), "folk" (Ziv & Leiser, 2013) in the titles to essentially refer to the people who are being studied. Picking on the "lay" term, researchers claim that they are investigating "lay theories" (Furnham, 1988), "lay people's cognitive models" (Williamson & Wearing, 1996), "lay beliefs" (Routh, 1999), "lay thinking" (Bastounis et al., 2004), "lay understanding" (Leiser & Aroch, 2009), "lay perceptions" (Leiser, Bourgeois-Gironde, & Benita, 2010) and "lay social representations" (Darriet & Bourgeois-Gironde, 2015). These concepts overlap and are at times used interchangeably.

My use of *lay people's theories of the economy* is intended to specifically connect this research with previous research it responds to, but it is with ambivalence that I use it. Each of the component terms (*lay people*, *theories*, and *economy*) are problematic in some way as elaborated in arguments I develop through the thesis. Firstly, by *lay people* I use what appears to be a developing norm for the use of "lay" in key studies and recent studies in this area of research (for example, see:

Williamson & Wearing, 1996; Bastounis et al., 2004; Leiser & Aroch, 2009; Gangl, Kastlunger, Kirchler, & Voracek, 2012; Dixon et al., 2014; Darriet & Bourgeois-Gironde, 2015; Leiser & Kril, 2017). I do not associate “lay” with any pejorative meaning (for analogous comments in a study of folk linguistics, see: Niedzielski & Preston, 2000, p. viii). Furthermore, in this thesis, I contest the premise of research that straightforwardly assumes economic experts are or should be authoritative with respect to lay people’s thinking (for example, see: Caplan, 2001; Rubin, 2003). That being said, the literature that compares economists and lay people will be addressed specifically as it offers a way to examine and problematise disciplinary assumptions that have not been thoroughly interrogated in the wider literature.

Secondly, by *theories*, again in seeking to respond to previous research I am using a term that has been used before (Furnham, 1988) and sometimes interchangeably with other terms, like “cognitive models” (for example, see: Williamson & Wearing, 1996, p. 6). The use of *theory* evokes the kinds of formality, coherence, organisation, consistency, and so on, that economists aspire to in a scientific mode of enquiry. This use of *theory* indicates a second assumption I problematise, related to a relatively structured kind of cognitive phenomena. Whether the economists and psychologists studying lay people’s thinking use the word *theory* or not, they often approach their research in a way that foregrounds the kinds of functions of economists’ theories (for example, a “heuristic” lay people use in the absence of understanding of macroeconomic causality, see: Leiser & Aroch, 2009). It is legitimate to question if lay people have theories in this sense, if they theorise, what theories are, and where theories come from. There are wider meanings of *theories* though that are relevant to this literature, as the recent use of “conspiracy theories” by Leiser, Duani, and Wagner-Egger (2017, p. 2) indicates. I use *theories* broadly to highlight regularities related to people’s thinking. While this could include how lay people conceptualise, reason about, explain and categorise, this broader understanding is more agnostic about the nature and content of these regularities.

Finally, we can consider the choice of the term *economy*. There is obviously a broad meaning of *economy* in the sense Leiser and Kril (2017) use when they frame their chapter as “How laypeople understand the economy” as a container for “the economic”. A number of studies use *economy* in their

titles in this way when positioning their research as enquiries into lay people's thinking about the economic domain (or the domain of economics) (for example, see: Blendon et al., 1997; van Bavel, 2000; Caplan, 2001; Roland-Lévy, Kirchler, Penz, & Gray, 2001; Wobker, Lehmann-Waffenschmidt, Kenning, & Gigerenzer, 2012). This usage is useful in marking out and connecting to the relevant literature. However, in rethinking and addressing *lay people's theories of the economy* I am proposing that to address the disciplinary and cognitive assumptions it is relevant and necessary to attend to *economy* in a specific sense. This alternative, and what I mean by "specific sense", is to orient to the use of the word *economy* itself. This reorientation requires further discussion, but it is relevant at this point to introduce the critical political psychological perspective I am adopting to address the aim of rethinking lay people's theories of the economy.

This research approaches the study of lay people's theories of the economy from the perspective of critical political psychology. While there are multiple accounts of what the *critical* qualifier means or should mean, in general it is used to differentiate and signify a critical stance to the prominent tradition of political psychology that primarily undertakes its project as an applied psychological enquiry into the political behaviour of individuals and, like mainstream psychology, is often individualist, positivist and empiricist in its orientation (Gergen & Leach, 2001; Weltman & Billig, 2001; Nesbitt-Larking, 2003; Nesbitt-Larking & Kinnvall, 2012; Tileagă, 2013; Sensales & Dal Secco, 2014; Montero, 2015). Critical political psychology, in the way I am using it, is interpretivist, emphasises the social, historical and ideational context of thinking, and open to reflecting critically on psychological enquiry itself (Nesbitt-Larking & Kinnvall, 2012; Tileagă, 2013; Sensales & Dal Secco, 2014). Critical political psychology is interested in studying the psychological dimensions of political phenomena, although is open to questioning what this entails, as well as investigating the political dimensions of psychological enquiry.

To address the aim of rethinking lay people's theories of the economy I draw on Michael Billig's (1987, 1991) work on rhetorical psychology (also, see: Condor et al., 2013; Gibson, 2015). Rhetorical psychology has been influential on the development of critical political psychology (Gergen & Leach, 2001; Weltman & Billig, 2001; Nesbitt-Larking, 2003; Nesbitt-Larking &

Kinnvall, 2012; Tileagă, 2013; Sensales & Dal Secco, 2014). Chapters on “Political Rhetoric” by Billig and his collaborators have been featured alongside other prominent theoretical approaches in the last two editions of the *Oxford Handbook of Political Psychology* (Billig, 2003; Condor et al., 2013).⁴ Rhetorical psychology was developed through critical engagement with the psychological perspectives that have been deployed in previous research on lay people’s theories of the economy. So, as well as providing a perspective to rethink lay people’s theories of the economy and how to go about studying them, rhetorical psychology offers critical insights relevant for examining previous research. I will briefly introduce some of the key aspects of rhetorical psychology I draw on in this thesis.

In proposing a rhetorical psychology, Billig (1987, 1991) drew on the tradition of instruction on rhetoric, “the long established discipline of studying persuasion” (Walsh & Billig, 2014, p. 1677), for insights into thinking. His key proposition is the idea that “internal thinking” involves rhetorical processes of “self-deliberation and self-persuasion” (Billig, 2003, p. 229), or put another way “deliberative thought is internalized argumentation” (Billig, 1991, p. 72). The idea that “our private thoughts have the structure of public arguments” (p. 48) has a long tradition in rhetorical instruction back to the ancients (Billig, 1987, pp. 110-111) and is expressed in the work of Vygotsky, the Bakhtin circle, and Wittgenstein (Billig, 1999a, p. 48). In challenging a hard distinction between private thinking and public arguing (p. 46), Billig’s psychology is explicitly focused on that kind of thinking that is a language-based phenomenon, that is inherently social, a kind of social action. Of course, not all use of language involves thinking (e.g. reading from a pre-scripted speeches) and not all thinking involves the use of language: this is not the psychology of perception (that is common to animals) or the psychology of problem-solving (that he suggests is a primary concern of cognitivist-influenced psychological enquiry). Rhetorical psychology is explicitly concerned with the kind of “uniquely human thinking that involves words: for instance, thinking about morality, politics, the course of our lives, the characters of others, what will happen tomorrow” (p. 49). This is a kind of dialogical

⁴ Billig’s diverse body of scholarly contributions have been influential on a diverse range of topics in social psychology and in the wider social sciences (for discussion of his work and legacy, see this recent edited volume: Antaki & Condor, 2014; and, in particular, the introductory chapter: Condor, 2014).

thinking that we do in “noisy” public ways and “silent” private ways (Billig, 1987, p. 111), what Wittgenstein refers to as “saying inwardly” (Wittgenstein, 1968, p. 220; see: Billig, 1999a, p. 48).

There are related methodological implications from “tak[ing] language seriously” (Billig, 1991, p. 14). A key implication of emphasising the public nature of thinking is that there is an opportunity to observe people thinking in spontaneous dialogue:

In the to-and-fro of conversation, people are engaged in the activity of thinking, as they formulate and react to novel utterances. Given the speed of conversation, it makes little sense to assume that the thinking is always happening silently internally just before words are uttered: the thinking is occurring noisily in the social activity of talk. Methodologically, therefore, thinking is outwardly observable.

(Billig, 2006, p. 19)

Previous enquiries applying rhetorical psychology have applied this insight to analyse dialogues in informal settings, television broadcasts, and interactions in psychological experiments (Billig, 1991, 1992/1998; Weltman & Billig, 2001; Gibson, 2011, 2015). In Billig’s work the concern has often been to study ideological dimensions of people’s thinking by identifying appeals to the shared common-sense of a social group (in particular, see: Billig, 1992/1998; and the development of these ideas, in: Billig, 1987; Billig et al., 1988; Billig, 1988, 1991; Billig & Sabucedo, 1994).

A crucial interpretive step of the rhetorical perspective is to attempt to recover the “argumentative context” of an utterance or text, as people’s thinking about public issues is intrinsically related to what is controversial and what is being argued against (Billig, 1991, p. 44). Studying public rhetoric, therefore, has further significance beyond studying spontaneous dialogue, which is that it allows the researcher a way to understand the context of debate and arguments that people are orienting to when they think. Billig, therefore, conceives a critical political psychology enquiry as the rhetorical analysis of public utterances, connecting observable public thinking with its ideological and argumentative context.

There is a connected literature that is relevant to this shift in emphasis to public rhetoric, which informs this research. Alan Finlayson (2007, p. 552) has argued for “[t]he study of political arguments, as they take place ‘in the wild’” and along with James Martin, recommended that scholars

of politics should attend to the “everyday” or “routine” expression of political arguments, ideas, and ideology (Finlayson, 2012, p. 751; J. Martin, 2013; also, see: Finlayson & Martin, 2008). I borrow the phrase “in the wild” to describe how I reconceptualise and intend to go about studying lay people’s theories of the economy and as a contrast to the problematic assumptions I am examining. I will continue to use the “in the wild” term in quotes throughout this thesis and acknowledge here that this sparked an idea about how to conceptualise key assumptions in the literature: approaching lay people *from the Academy* (see Chapter 2) and approaching lay theories *in the head* (see Chapter 3).

I can now return to the specific sense of the word *economy* and the importance of this focused lens for this critical political psychology enquiry. In reorienting to this rhetorical perspective to interrogate and address key assumptions in the literature there is a shift in what is being studied. When I say I am studying lay people’s theories of the economy I am studying the use of the word *economy* as used in argumentative discourse “in the wild”, identifying common features of rhetoric related to *economy*, how it is used and what speakers are doing by using it to illuminate the active, social and ideological qualities of lay people’s economic thinking.

The word *economy* is arguably a familiar feature of public discourse and is therefore significant in that studying it provides a way to escape the disciplinary lens of economics and to reconsider lay people’s economic thinking as a public rather than a private phenomenon. The word *economy* represents the contingent and constructed nature of economic knowledge both in formal academic expression and “in the wild”. As will be discussed in Section 3.5, the modern usage of *economy* is a relatively recent phenomena, only emerging as a feature of public discourse during the twentieth century (Emmison, 1983; Hope, 1991; Mitchell, 2005). Also relevant to the choice of *economy* is the suggestion by Schabas (2009, p. 17) that the term *economy* marks distinct kinds of thinking by economists and lay people: “No single term in economic discourse better captures the serious divide between the folk and scientific approaches”. Beyond close association with a handful of macroeconomic indicators, *economy* appears to lack theoretical elaboration by mainstream

economists,⁵ but based on Schabas' observations of patterns of language use it appears that there are distinct "folk" patterns of usage. Given these points, the choice of *economy* is significant and not just about narrowing the scope of this research. Other words could have been chosen (e.g. *money*, *economic*, *market*, *inequality*) and studying the use of these words would be likely to highlight different qualities of lay economic thinking than revealed by studying the use of *economy*. The choice of *economy* is significant, however, in connecting to and responding to previous research and in differentiating this "in the wild" enquiry.

In keeping with the rhetorical approach and developing an understanding of lay people's thinking "in the wild" I restrict my focus to analysing people's use of *economy* in public settings. I have studied debates in New Zealand's parliament and calls to talkback radio shows. The relevance of studying parliamentary debates and talkback calls is introduced in Chapter 4 and discussed in detail in the background sections in Chapter 5 and Chapter 6.

To analyse public rhetoric related to the economy I am utilising methods that are increasingly being applied to the study of political and media discourse (for example, see: Partington, 2013; Ädel, 2010), namely a "corpus-assisted" approach (Partington, 2004, 2013; Baker, 2006). Corpus linguistics is "the study of language based on examples of 'real life' language use" and a corpus is a data-set collecting together examples of language use stored in a format that is able to be processed by a computer (McEnery & Wilson, 2001, p. 1). In developing a new mode of enquiry, I draw on and extend methods developed by corpus linguists and computer scientists as well as my professional background as a software developer. To conduct this research I have developed software to create two large corpora and to implement techniques developed by corpus linguists to identify and assist in analysing patterns of language use. Corpus methods will introduced in more detail in Chapter 4.

⁵ Schabas (2009, p. 5) notes it is a term that is missing in dictionaries of economics. While specific economists have argued that economics is (or should be) about understanding the economy (see for example: Boulding, 1988; Klammer, 2007, p. 5), there appears to be little practical agreement with this proposition as a basis for defining "economics" (Backhouse & Medema, 2009) and it appears that economists educated in top economics programmes do not consider "having a thorough knowledge of the economy" as an important criteria for success in graduate studies (Colander, 2007, pp. 24-26,95).

The discussion of terminology and theoretical and methodological perspectives serves to establish the scope of this research. The scope of this research is limited in one final way. This research limits the investigation to a specific political community at a specific point in time, the nation-state of New Zealand in 2016 (when the last of the data was collected). While the focus is on New Zealand, there are critical, theoretical and methodological insights for research on lay people's thinking on the economy more generally. However, I argue in this thesis that this contextual grounding is both necessary and required. In explicitly connecting people's thinking to the context of political debate involving use of the economy, New Zealand provides an interesting case. The 1980s and 1990s were a period of rapid and radical economic, social and political change in New Zealand. Facilitated by New Zealand's unicameral legislature and first-past-the-post electoral system, successive Labour and National governments implemented a series of neoliberal reforms (Kelsey, 1995; Goldfinch, 2000; Roper, 2015). The period since 1999, which has seen new political parties emerge with the introduction of proportional representation, has been characterised as "entrenching" and "continuing" neoliberalism, with successive governments led by the Labour (1999-2008) and National (2008-2017) parties consolidating the neoliberal orientation to economic and social policy (Roper, 2015, pp. 32-33). The analysis in this thesis primarily orients to the period that the National party was in government from 2008 and ends in 2016 at the time the talkback radio study was conducted (in February and March 2016). In 2017 a new Labour-led government was formed, which included New Zealand First, a populist party,⁶ as a coalition partner and supported by the Green party with ministerial roles. The new government has signalled that it intends to change the ideas underpinning economic policy and the timing of this research is, therefore, fortuitous in that it examines public engagement with economic ideas in the period before a moment of anticipated change.

⁶ For discussion of New Zealand political parties and New Zealand politics more generally, see chapters in Hayward (2015b). For example, the history and ideology of New Zealand First is addressed by Joiner (2015).

1.5 Significance of this research

There are five broad areas of significance for this research. The primary area of significance is the cross-disciplinary contribution that this research makes to the developing body of academic literature on lay people's theories of the economy. Specifically, in this thesis I am approaching the study of lay people's theories of the economy from the perspective of critical political psychology to address the unexamined philosophical and theoretical grounding of previous research. The first area of significance is therefore in developing an "in the wild" grounding for theory and method in relation to lay people's theories of the economy. The empirical studies are important in this regard to exemplify these theoretical and methodological points but, more importantly, the studies of public rhetoric in contemporary New Zealand provide the opportunity to derive specific findings that can inform future enquiry into lay people's economic thinking.

The second area of significance relates to the two specific settings that were studied, New Zealand's parliament and talkback radio, and the specific concern with economic rhetoric. As I will explain in Chapter 5 and Chapter 6, despite some exceptions (Loginova, 2013; Ladley, 2006; McMillan, 2005), both parliamentary discourse and talkback radio discourse in New Zealand are under-researched. In addition, while the economic reforms of the 1980s and 1990s in New Zealand have been a significant area of scholarship (for example, see: Kelsey, 1995; Goldfinch, 2000; Roper, 2015), research on rhetorical aspects of this in the New Zealand context has been rare (Hope, 1991; Quigley, 2010). This research therefore contributes to an understanding of economic rhetoric in both parliament and talkback radio (and the media) in New Zealand in the twenty-first century.

The third area of significance relates to method, and specifically the use of corpus methods. This research contributes to the growing literature on the relevance of corpus methods for research on politics (Partington, 2013; Ädel, 2010) and the wider direction of research by social scientists who engage with large amounts of textual data using digital, computational or computer-assisted methods (Grimmer & Stewart, 2013; Wiedemann, 2013; Rogers, 2013; Marres, 2017). While it is becoming more common for corpus linguists to study political texts it is still relatively rare for political

scientists to apply corpus methods and even rarer to engage deeply with the theoretical, methodological and technical aspects of corpus methods. More specifically, although corpus linguists have pointed out the relevance of corpus methods for social psychological research on explaining social phenomena (McEnery & Wilson, 2001, p. 129), psychologists, at least in relation to thinking in the economic domain, have not followed this advice. Furthermore, although corpus methods have been argued to be relevant for complementing or augmenting a variety of approaches to discourse (Baker et al., 2008; Mautner, 2009), the arguments still need to be made for the suitability of corpus methods for research that draws on rhetorical (and discursive) psychology, which is a perspective more often associated with conversation analysis and close qualitative readings. This research both develops the argument and represents an example of the synthesis of these approaches.

Fourthly, the corpora that were created through this research, as well as the specific methods developed to compile them, are themselves significant contributions to the research community. In particular, a major contribution of this thesis is the New Zealand Parliamentary Language Corpus (Ford, 2016), which is a large corpus based on thirteen years of debates in the New Zealand parliament. This can facilitate novel and previously impractical research on New Zealand political discourse by political scientists, linguists, legal scholars and other social scientists interested in the parliamentary record. In addition, I have demonstrated a way to engage with the contents of untranscribed audio corpora in a way that is analogous to text-based corpus research, which also has relevance to problems recently identified by discourse-oriented researchers wanting to analyse talkback (Hanson-Easey & Augoustinos, 2017) and other large bodies of recorded speech.

Finally, in situating this research, I indicated the context of debate and criticism related to economic expertise, both in relation to economists and lay people, and concrete actions being undertaken to rethink economics and public engagement with economics. It is hoped, in some small way, that this refocus on lay people, rather than economists themselves, will provide a new perspective on these debates and perhaps help rethink the nature of the gap between economic experts and lay people.

1.6 Overview

This thesis is structured in two parts. The first part examines the assumptions of previous research on lay people's theories of the economy and proposes an alternative theoretical and methodological foundation. The second part describes the two studies I conducted and discusses their findings in relation to the aim of rethinking lay people's theories of the economy.

Chapter 2 critically examines literature that approaches the study of lay people's economics *from the Academy*. Approaching the study of lay people's economics by privileging this disciplinary perspective is most evident when comparing lay people with economists, but this disciplinary assumption is more pervasive than this. I argue that by foregrounding the disciplinary perspective, previous research by economists and psychologists on lay people's economic thinking have tended to reproduce economists' ideas about their own expertise and the ignorance of non-experts. This potentially reveals more about economists' thinking than it does about lay people's thinking.

Chapter 3 examines a second key assumption, which is that lay people's economic thinking is primarily an individual-level cognitive phenomenon. Previous research has predominantly conceived of lay theories *in the head* and have embedded this assumption in the way they research lay theories. I propose an "in the wild" orientation to reconceptualise lay people's theories of the economy, which is also a reorientation of what to study when studying lay people's thinking.

Chapter 4 discusses what studying lay people's theories "in the wild" means for how I conducted this research. I propose to study the use of *economy* in public rhetoric. I argue for the relevance of corpus methods for investigating lay people's theories of the economy in this way. This chapter also introduces the two studies that follow in Chapter 5 and Chapter 6.

The first of the studies, described in Chapter 5, is a corpus-assisted study of political rhetoric related to the economy in the New Zealand parliament. This study aims to identify common features of political rhetoric related to the economy to establish the context of political debate and to propose some features of political rhetoric that have relevance beyond parliament.

The second study, described in Chapter 6, is a corpus-assisted study of the rhetoric of the economy on talkback calls. This study aims to identify common features related to the use of *economy* by callers and talkback hosts. This chapter also reports on techniques I developed to find and analyse keywords within a large audio corpus.

In Chapter 7 I discuss and connect the findings of these studies back to the primary aim of this thesis, which is to rethink lay people's theories of the economy. In addition, I revisit and discuss aspects of the methodological contribution of this thesis, including the specific corpora and techniques developed. I then address possibilities for future research. Finally, to conclude the thesis, I address the broad practical relevance of the findings for contemporary debates about economics and economic policy and lay people's participation in these debates.

Chapter 2 Challenging the view *from the Academy*: lay people, economists and the politics of economics

2.1 Introduction

In Chapter 1 I proposed that rethinking lay people's theories of the economy requires interrogating key assumptions of previous research. When we start talking about *lay people*, this is itself tacit acknowledgement that there are experts. Economists obviously might be interested in lay people's thinking related to what they consider as their disciplinary knowledge. In this chapter I review and discuss the contribution of scholarship that *compares lay people with economists* or that otherwise privilege the disciplinary view *from the Academy* (for example, see: Blendon et al., 1997; Walstad, 1997; Caplan, 2001; Rubin, 2003; Blinder & Krueger, 2004; Wobker et al., 2012). These researchers typically treat these comparisons as self-evident, however I question the obviousness and usefulness of these comparisons, and in fact, problematise them. These comparisons have tended to set up lay people as problematic due to their lack of economists' knowledge, however the research agenda itself is typically self-fulfilling in that it confirms that lay people do not know what economists know.

In terms of the overall argument of the thesis this justifies why I am not conducting another comparison of economists and lay people. However, there is a larger point to be made, examining comparisons between experts and lay people is an opportunity to reflect on and question the relevance of a disciplinary perspective. This chapter, therefore, also addresses a more pervasive tendency to privilege a disciplinary lens, whether the research on lay people is being conducted by economists or psychologists. I discuss the problems of such an overtly disciplinary perspective if researchers are interested in lay people's thinking, both in essentialising the economics that people should know and in constraining lay people's thinking to a disciplinary frame. I connect this disciplinary assumption to the historic tendency to depoliticise economists' ideas and to politicise lay people's interventions in

political debates. Arguing that economic knowledge is contestable is not to imply that conclusions based on ignorance are not contestable. It is important to make clear at the outset of this chapter that, although I am critical of the way economists present their expertise, the primary point is that disciplinary assumptions are problematic if we are interested in lay people's "economics".

2.2 Research comparing lay people with economists

We are, of course, all psychologists anyway but some of us are clearly better than others. Of course we are also all economists, lawyers, meteorologists as well. What, therefore, determines the content and accuracy of a person's economic or medical knowledge and beliefs?

(Furnham, 1988, pp. viii-ix)

In his book on lay theories in the social sciences, Adrian Furnham introduces lay theories by contrasting "poor" lay theories against an idealised form of "good" science (1988, p. 3). Similarly, in the quote above he refers to the "accuracy" of lay people's economic beliefs. In their recent review of the field, Leiser and Kril (2017, p. 140) claim that "lay people's understanding of the economy frequently contradicts accepted professional knowledge" and they refer to the irrationality of systematic deviations from expertise grounded in "many misconceptions, simplifications and distortions that plague non-expert understanding" (p. 142). While both accounts of lay people's thinking are more complex and nuanced than these examples might suggest, this illustrates that even if the focus of research is not testing how little disciplinary knowledge lay people know, there is a tendency, even in the psychological research, to think disciplinarily when discussing lay people's theories in the economic domain. This indicates the need to address economics and economists when discussing lay theories related to the domain economics and economists covers. In this section I review the contribution of a subset of the literature that treats economics or economists as the explicit benchmark for lay people's beliefs.

Economists cannot be ignored when talking about lay people's theories of the economy. Although there is some relationship between the thinking of economists and lay people in relation to the economic domain much of the literature on lay people does not address this matter explicitly. In particular, one subset of the literature on lay people, which I review in this section, treats economics

or economists as the explicit benchmark for lay people's beliefs and much of this research assumes that whether or not economists are influential or authoritative with respect to lay people's knowledge, beliefs, and attitudes related to the economy, they *should* be. A good place to begin discussing the relevant literature is to consider what we know about how lay people's knowledge, beliefs, attitudes, and so on, compare with economists.

So firstly, what *do* lay people know about what economists know? Past research has found that lay people do not know what economists know and this is perhaps intuitive and unsurprising (Walstad, 1997; Blendon et al., 1997; Blinder & Krueger, 2004; Wobker et al., 2012). One study supported by the findings of subsequent research (Walstad, 1997), surveyed a random national sample of 1005 US adults and found lay people generally lack understanding of economic terminology, institutions related to policy, and causal relationships. One in two people surveyed could not identify the correct definition of a federal budget deficit, the institutions involved in setting fiscal policy or the likely effect of exchange rate changes on exports.⁷ People also appeared to lack understanding of common macroeconomic indicators. For example, two thirds of people did not identify the Consumer Price Index as the common measure of inflation.

What is perhaps more surprising is that a subsequent study of college students found that overall scores on the same survey instrument were not drastically higher for students who had completed an economics course (Walstad & Allgood, 1999). The authors commented that while taking an economics course improved the score somewhat, the average score of the group who had completed an economics course only equated to "a D- on a standard grading scale" (p. 350). Students who had completed an economics course scored 62% on average compared with 48% on average for those who had not studied economics.

It is also likely that knowledge will vary between countries and over time, but this is largely unexamined because research has mostly been conducted in the United States and has not compared responses to the same survey items over time. A recent study, however, demonstrated a similar lack of

⁷ Another study pointed to similar conceptual misunderstanding when reporting that people confuse budget deficits and balance of payments deficits (Paldam & Nannestad, 2000).

“minimal economic knowledge” in Germany and suggested a need to attend to differences in economic arrangements and differences at the level of the nation-state (for example, the “cultural meaning of the economy”) (Wobker et al., 2012, p. 6).

If people do not understand economic indicators like the Consumer Price Index, it is not surprising that they do not know the levels of these indicators and this indicates a general difference in the way economists and lay people view the economy. Research reveals that most people are not aware of levels of the commonly-used economic indicators or statistics (including measures of economic growth, inflation, unemployment, balance of payments and budget deficits or surpluses) (Blendon et al., 1997; Holbrook & Garand, 1996; Paldam & Nannestad, 2000). People do however appear somewhat better at describing trends in economic growth, inflation and unemployment (Blendon et al., 1997; Conover, Feldman, & Knight, 1986; Duch & Stevenson, 2010).

There are inconsistencies in some of these results however. One of these studies (Conover et al., 1986) attempted to explain their finding that people could more accurately assess changes in unemployment compared with changes in inflation. The authors suggested that people intuitively understood unemployment rates more easily than the rates of change reflected by inflation statistics and connected more easily with media coverage of inflation (Conover et al., 1986, pp. 569-570). It is also possible that people attend to these indicators when they reflect a problem. Inconsistencies can also be attributed to the way people are asked about economic indicators (in this case a multiple-choice item as opposed to the open-ended response format of other studies) and the degree of tolerance accepted for a correct answer (e.g. 0.5% difference versus 1%).⁸

Differences between economists and lay people go beyond knowledge of economic “facts and figures”. Studies comparing survey responses from economists and lay people have found divergence on economic perceptions, explanations and predictions for economic phenomena and attitudes to policies and change (Blendon et al., 1997; Caplan, 2001; Jacob, Christandl, & Fetchenhauer, 2011;

⁸ This could be behind the surprising claim of a study conducted during the midst of global financial crisis in 2008 where 74% of people surveyed “got it right” when asked about the unemployment rate (Lewis-Beck & Nadeau, 2009, p. 480), which in personal correspondence one of the co-authors indicated they used a multiple-choice item (although could not provide the item or options).

Haferkamp, Fetchenhauer, Belschak, & Enste, 2009; Sapienza & Zingales, 2013a). Moreover, these studies suggest that these differences are systematic. For example, rather than just deviating from the judgments of economists, lay people in the first two studies were on average more pessimistic than economists about past and predicted future economic performance (Caplan, 2001; Blendon et al., 1997). Lay people and economists in these studies also diverged over the reasons “the economy is not doing better than it is” (Caplan, 2001, p. 401), with lay people on average more likely to blame high taxes, high foreign aid spending, and the large numbers of people on welfare for poor economic performance than the economist group in both studies. Lay people and economists also differed on their assessment of factors likely to be “good for the economy”, assessing trade agreements more negatively on average than economists did (Blendon et al., 1997, p. 111).

There is of course a simple explanation for differences between the knowledge and thinking of economists and lay people: economists are formally educated in economics. Even if a lay person achieved a high score on a test of basic economics, perhaps expressing impressive recall of ECON101 definitions and recent statistics from media reporting, it seems obvious that a lay person will not know what an economist knows or reason in the way an economist does.

In addition to this obvious marker of difference, economists and economic psychologists have also suggested that systematic differences between the judgments of lay people and economists can be explained with reference to differing criteria applied in decision-making and evaluations and cognitive limits associated with lay people’s thinking (Haferkamp et al., 2009; Jacob et al., 2011; Leiser & Aroch, 2009; Caplan, 2006). In particular, economists are argued to assess options, for example trade policy, in terms of economic efficiency and lay people in terms of fairness (Rubin, 2003; Haferkamp et al., 2009; Jacob et al., 2011). Furthermore, a study by Leiser and Aroch (2009, p. 12) provides evidence that lay people judge causal relationships between macroeconomic variables according to the “good-begets-good heuristic”, which posits that: “[a]n increase in one good variable will increase the values of other good variables, and decrease those of bad variables”, where “good” was based on the consensus of a survey of people with no economics training (e.g. an increase in “Government expenditure” is “bad” and an increase in “Rate of economic growth” is “good”, see:

Leiser & Aroch, 2009, p. 9). Other researchers have coined names for cognitive mechanisms and suggest that these mechanisms explain lay people deviations from economists' judgments. For example, lay people are argued to be predisposed to various biases ("antimarket bias, antforeign bias, make-work bias, and pessimistic bias") (Caplan, 2006, p. 30) and to a thinking-style that is "zero-sum" (Rubin, 2003, p. 157).

In contrast to these studies, Sapienza and Zingales (2013a) offer a different explanation for differences they found between the policy assessments of economists and lay people. Rather than attributing differences to a knowledge deficit or the psychological deficiencies of lay people, the authors argued that differences in their study were related to a divergence of interpretation: "Economists answer [the policy questions] literally and take for granted that all the embedded assumptions are true, average Americans do not" (p. 642).⁹ This issue of differing interpretation could be more pervasive in the studies that find differences between the judgments of lay people and economists. This might underpin, for example, economists' overwhelming positivity in Blendon et al. (1997, p. 111) that trade agreements and "[i]ncreased use of technology in the workplace" were "good for the economy", especially since economists often conceptualise trade and technology as positive in terms of their conceptualisation of efficiency or output in economics textbooks (for example, see: Mankiw, 2012). Furthermore, when asked to judge causal relationships between pairs of macroeconomic variables, the "economists" (students in their final year of an economics degree) in Leiser and Aroch (2009) were almost certainly basing these responses on a different kinds of "heuristic": the specific macroeconomic theories or models they had been taught.

Before moving on, there is one point that should be addressed related to the categories, lay people and economists. While there have been a number of studies demonstrating differences between economists and lay people *on average*, this focus on comparing lay people with economists does not mean that lay people perform the same in these comparisons. This variation was the focus of a study

⁹ The authors did not attach a pejorative bias label to this thinking style of economists. It should also be noted that in this study the expert economist group and the lay people groups were not presented with the same wording, and so people from each group were responding to different questions. Therefore, issues of interpretation are potentially multiplied (for example, there is an interpretive step required in simplifying the questions for the lay people group).

exploring “what makes people think like economists?” (Caplan, 2001). Economist-like thinking was associated with being male, highly educated, with a secure job and growing income. Other studies also reinforce that economist-like thinking is associated with similar indicators identified with privilege and power (Wobker et al., 2012; Walstad, 1997; Blinder & Krueger, 2004; Williamson & Wearing, 1996). However, perhaps a more interesting deduction from Caplan’s “what makes people think like economists” is that he presents economic knowledge as consensual, as do other economists researching lay people (for other examples, see: Walstad, 1997; Rubin, 2003).¹⁰ There is evidence in Caplan’s study, and other research (Sapienza & Zingales, 2013a; Blendon et al., 1997), of both consensus and dissensus related to economists’ evaluations of policy, however as Sapienza and Zingales (2013a) suggest, consensus may be related to the way economists collectively respond to the questions and their disciplinary way of thinking. That economics is characterised by consensus, an orthodoxy that dominates the mainstream, is actually often a critical commentary (Colander, Holt, & Rosser, 2004; Dequech, 2007).

2.3 Challenging the view *from the Academy*

The literature comparing lay people with economists perhaps reveals a predictable finding. Clearly, it is unlikely that lay people would know what economists know. In some ways, all that is required to determine the economics that most lay people do not know would be to open an economics textbook and start reading. In this section I attend to claims about expertise and ignorance and problematise the expert/lay division reproduced in comparative research by questioning the way economic expertise is represented in this research. This discussion challenges to the meaningfulness of the disciplinary frame if the aim is to understand lay people’s thinking.

2.3.1 Claims about experts and ignorant, expertise and ignorance

No matter what the economic content of questions or the test format, the study results remain the same—youth and adults show a great deal of ignorance when it comes to basic economics.

(Walstad, 1998)

¹⁰ This would be a strange thing to say about political scientists. It should be acknowledged that there are a variety of ways economists’ perspectives are constructed in the literature and this deserves further consideration by researchers.

It is important to overcome the errors of folk economics because voters who believe these errors will favour counterproductive policies. Economists would do a better job of persuading others and of teaching if we paid explicit attention to folk economics.

(Rubin, 2003, p. 169)

When researchers compare lay people with experts they make additional claims, sometimes overt, sometimes less so. When lay people's "ignorance" or "errors" are the focus researchers also make claims about the status of knowledge in question and the status of the experts. In terms of the status of knowledge, the presumption is that there is a correct representative or essential set of knowledge that people can know and that this knowledge has some usefulness or benefit to the knower or the collective in relation to a set of problems or applications. In terms of the status of the expert, the presumption is that there actually are people who are experts with respect to the body of knowledge and that these experts are not only privileged with respect to this knowledge, but also in relation to what the knowledge is useful for. What follows from comparing lay people with the reference point of economists is an evaluation, relying on these assumptions about the status of economics and economists. This is not typically stated as overtly as the quotes above or Rubin's (2003, p. 164) claim that "for many economic problems, folk economics will get the wrong answer"¹¹ or Caplan's (2002, p. 434) "naïve theory" that "economists are right and the public is wrong" in explaining differences. However characterised, the inevitable "ignorance" or "error" found is not presented as benign. The ignorance finding, whether framed in negative or pejorative terms, are part of arguments about the status of economists as experts and the relevance of their expertise.

The rhetorical moves to negative evaluation are expressed in a variety of ways and it is worth exploring these in more detail before challenging them. One recent study, which begins with the claim that "[m]odern society is characterized by an economization of all aspects of life", argues that basic economic knowledge is necessary "for understanding and successfully participating in the economy" (Wobker et al., 2012, p. 3). Without this basic information, people are presumed to be ill-equipped for their judgments about economic problems and policy proposals, as well as their personal economic

¹¹ In attempting to explain where folk beliefs might come from, Rubin, with no overt indication of irony, queries whether people that reject neo-classical economics have something to gain from the promotion of rival, incorrect theories (2003, pp. 163-164).

decisions. The authors argue that this is a problem for the political collective requiring a collective solution in terms of improved economic education. This is consistent with arguments presented by other researchers. Blendon et al. (1997), for example, argued that lay people's views of the economy are important because political leaders take them into account when making decisions about policy. That lay people's perceptions differ from those of "the expert community" is, again, a problem that requires economic education (p. 117). Walstad and Larsen (1993, p. 1230) argued that it might be worthwhile to classify the policy positions of the "informed and uninformed" when presenting survey findings, because not doing so "has the potential to mislead policy makers on economic issues". Furthermore, evidence that people with higher scores on their inventory of economic knowledge were more likely to support a set of economic policies they suggested were favoured by most economists, was used to make the case for education to improve economic literacy (for an example of Walstad's advocacy for economic literacy, see: Walstad, 1998).

In contrast, Bryan Caplan (2006) offers a different account of inconsistencies between lay people's and economists' beliefs and preferences, framing these deviations in scientific terms using the language of psychological biases. For example, people who fail to understand the "invisible hand" of market mechanisms demonstrate an "*antimarket* bias", while people who "underestimate the benefits of interaction with foreigners" (which in part based on items assessing support for trade agreements and for companies offshoring their labour force) demonstrate a "*antiforeign* bias" (p. 10). Caplan, relying on survey data, interprets deviations from economists' policy preferences as evidence for a set of biases he labels. In turn, these biases are presented as a significant problem for the political community because they will influence support for flawed policies (i.e. policies economists oppose). In rather circular fashion, it seems that people who support policies-economists-oppose, which he labels as biases, might demonstrate the dangerous capacity to support policies-economists-oppose.

It should be made clear that the most strident claims about economic knowledge and economists' privileged status with respect to the economic knowledge are made by the economists who have studied lay people's economics. Research by psychologists, including studies that compare the reasoning of economists and lay people on specific policies, has tended to be more critical of

economic theories and assumptions. Both Haferkamp et al. (2009) and Jacob (2012), for example, are careful to point out that economists are not privileged regarding the status of their judgments on policy and Jacob offers an extended critique of economic knowledge in his conclusion. Even while this takes a more critical stance on the status of economists' recommendations, lay people's reasoning is argued to derive from fairness criteria as well as a series of biases or errors causing deviations from a rational basis of economic calculation. While not privileged in having an uncontested ethical basis for judgments, economists are privileged in having a basis for their policy preferences in rationality and a scientific mode of enquiry. In contrast, the groundings of lay people's judgments are ethical concerns and errors. This psychologically-oriented research, although not primarily concerned with the accuracy of lay people's economic knowledge and decision-making, stated the relevance of the research for economists and political leaders in terms of policy implications aimed at addressing lay people's deviance from economic reasoning (Jacob, 2012, p. 130; Haferkamp et al., 2009, p. 537)

It is useful, as context, to point out that psychologists approaching the study of lay people's "economics" and, for that matter, much of the research by economic psychologists, have historically problematised the psychological underpinnings of economic theory and, in particular, the rational actor, or *homo economicus*, who populates economic models and the theory of action it reflects (Ranyard & Ferreira, 2017; for example, see: Williamson & Wearing, 1996). This is important to recognise, because in identifying that the project of psychologists is to contribute more psychologically acceptable underpinnings to develop a more valid and robust economics, the limits of critique are typically bounded and respectful in terms of economists' ideas.

Although some claims about lay people are more overt and problematic than others, the implications are the same when economists are the reference point for lay people's thinking about the economic domain. It is not just that lay people do not think like economists; it is that lay people's "ignorance" is a problem. Of course, this is not some general ignorance, but rather an instrumental ignorance, describing a lack of knowledge relevant for a purpose. This instrumental ignorance is *about* a specific knowledge domain, economics, which is argued to be necessary *for* the purpose of understanding and evaluating policy and politics more generally. The implication of these

comparisons is that lay people should think like economists, or perhaps that the expert domain should be left to the experts.

If the status of economists and economics can be questioned then comparisons between economists and lay people are rendered much more arbitrary, as are negative judgments about lay people's "ignorance" in relation to economists' knowledge. In the following sections I will discuss three challenges to the status of economics with respect to lay people's theories: the dominant self-image of economists' scientific status can be challenged; that essentialising economics neglects debate and change within the discipline of economics; and, that a disciplinary frame is not meaningful if the concern is understanding lay people's thinking.

2.3.2 Challenging economists' self-image as a challenge to economic knowledge

The first challenge relates to economists' self-image and the grounding of claims about economic expertise in an appeal to science, rationality, and truth. Caplan (2006) makes this claim overtly in contrasting biased thinking with "economists' scientific objectivity". However, more generally, insistence on the relevance of economists' knowledge are claims that economics constitutes truth about the world (for example, Walstad writes about why it is important that the public understands economics, see: Walstad, 1998). Fourcade, Ollion, and Algan (2015, p. 92) suggests that economists' "superiority" is grounded in common-place ideas within the profession about the scientific-ness of economics. Reflecting on the discipline, Klammer (2007, p. 10) suggests:

The most devastating criticism an economist receives is that his or her work is not scientific. "What you are doing is not economics" is a powerful statement, and can destroy honest work.

The suggestion that economic knowledge is grounded in hard science has been subject to a tradition of critique (Hayek, 1975; Deirdre N McCloskey, 1998; Fourcade, 2018). The expert-lay distinction lacks an explicit characterisation of the nature of economists' expertise and claims about the world.

The claim that economics is more scientific than other social sciences appears to be something many economists believe and portray about themselves and their discipline. The textbook

that dominates undergraduate economics' instruction, Mankiw's "Principles of Economics",¹² communicates this self-belief to students by arguing economics is scientific like the natural sciences:

[Economists] approach the study of the economy in much the same way as a physicist approaches the study of matter and a biologist approaches the study of life: They devise theories, collect data, and then analyze these data in an attempt to verify or refute their theories.

(Mankiw, 2012, p. 22)

Cutting off objections to this claim, Mankiw argues that the application of the scientific method defines scientific enquiry:

To beginners, it can seem odd to claim that economics is a science. After all, economists do not work with test tubes or telescopes. The essence of science, however, is the *scientific method*—the dispassionate development and testing of theories about how the world works. This method of inquiry is as applicable to studying a nation's economy as it is to studying the earth's gravity or a species' evolution. As Albert Einstein once put it, "The whole of science is nothing more than the refinement of everyday thinking."

(Mankiw, 2012, p. 22)

With pertinent Einstein quote included, Mankiw associates economics and enquiry into the "nation's economy" with analogous enquiries in the natural sciences.

This is not just a feature of undergraduate education though. This self-image was also evident in a recent study of students attending leading US economics graduate programmes:

[Interviewer:] **So if you were telling people which social science had the best approach, what would you say?**

All (in unison) Economics.

Ellen I would say that economics is the only one of the social sciences that uses statistics; I don't see other social sciences trying to prove the statistical significance of something.

Excerpt of a group interview of graduate students in economics (Colander, 2007, p. 142)

A survey conducted as part of this same study asked students whether they agreed that "Economics is the most scientific of the social sciences" (p. 31). Three out of four students indicated they agreed with this statement, with only 16% disagreeing. A similar proportion of professional economists (the bulk of whom worked in academia) also agreed with this statement.

¹² For discussion of the dominance of the "Principles" textbook, see Zuidhof (2014, p. 159).

While many economists believe that economics is the “hardest” social science, scholars have challenged this assertion. A student in Colander’s study, one of only a few dissenting voices reported, commented on their dislike for:

the hypocrisy of economists treating economics like an “objective science”—e.g., constraining results to fit known “laws” that in fact have never been demonstrated—when in reality economics is based on a set of at-best questionable assumptions that are heavily biased in favor of certain implications ...

(Colander, 2007, p. 73)

One critic from within the profession, Deirdre McCloskey (2002, p. 41), reflected on the practices of “[e]conomics in its most prestigious and academically published versions”, and took similar issue with economics, arguing it fails to satisfy a basic characterisation of science. Paralleling Mankiw’s description of science, McCloskey asserts that:

A real science ... must do two things. It if only does one of them it is not an inquiry into the world ... An inquiry into the world must think and it must look. It must theorize and must observe. Formalize and record. Both. That’s obvious and elementary.

(p. 37)

McCloskey argues that the kind of theorising economists typically do is akin to philosophical games describing a model world based on a set of assumptions. Given a set of assumptions, there is some conclusion which derives from the assumptions. The theory is necessarily true. To construct a new true theory – assign new assumptions (instantiating a new theoretical world) and derive new (and potentially opposite) conclusions (rinse and repeat). Moreover, observation, she argues, is disconnected from theorising because theorising continues independent of empirical work in economics. McCloskey criticises this kind of theorising as pointless, failing to meet her benchmark for science as “inquiry into the world”.¹³

McCloskey is not alone in identifying these models as a prevailing and even defining mode of enquiry for “mainstream” economists (see: Colander et al., 2004; Colander, 2009; Lawson, 2005). The philosopher of economics, Tony Lawson (2005, p. 502), for example, claims that it is a commitment to the idea “that economic phenomena be investigated using only (or almost only)

¹³ McCloskey also goes on to challenge the manner in which economists “observe”.

certain mathematical-deductive forms of reasoning” that defines the “mainstream project of modern economics”. According to Lawson, heterodox economists cohere around their criticism of the orthodoxy in relation to this disconnect between the mode of enquiry favoured by the economics mainstream and its appropriateness in studying “the nature of social reality” (p. 502).

The most serious challenge to the scientific-ness of economics is perhaps the critique of the possibility of general theories in the social sciences, including economics. In his advocacy for a social science “that matters”, Bent Flyvbjerg (2001) draws on modern social theory to challenge just how conducive social reality is to the ideal of theorising exemplified by the natural sciences. He identifies a key differentiator between the natural and social sciences as the degree to which context matters. So regardless of the mode of enquiry, social scientific theory cannot hope to match the explanatory and predictive power of theories in the natural sciences because there is “an open-ended, contingent relation between contexts and actions and interpretations” (p. 43). Specifically addressing economics, Flyvbjerg suggests that even the theoretical entities that economic theory builds on are subject to this contingency (p. 44). To build theories economists must assume the stability of the “socially defined” entities, like money, as given, ignoring the complexity and the potential for change in the way people think about and use money in different contexts (p. 44). Since economic theories cannot predict changes in contexts, actions and interpretations, there is no way to predict when theories can predict. Practices and ideas related to money might change following a financial crisis, during a period of hyper-inflation, after a religious figure overturns a money-changer’s table, or when techno-utopian libertarians issue their own currency.

Philosopher of economics, Uskali Mäki (1996, p. 445) identifies the nature of economic entities as one of a number of “peculiarities of economics” requiring a redefinition of scientific realism in order to classify economics as a science. While theoretical entities in a conventional scientific realist view may have some existence beyond human thinking, economics theorises mental and social entities that “do not exist independently of the human mind” (p. 431).

Whether aspiring to a more self-reflective and scientific economics, like McCloskey, or a less restricted conception of science, like Mäki, or to a reconceiving of the grounds of social enquiry, like Lawson or Flyvbjerg, we appear a long way from the claims Mankiw or those of the economics' graduate students. There are non-trivial challenges to economists' claims to expertise about the domain they claim knowledge about. Researchers studying lay people's "economics" with a disciplinary frame should be able to articulate and justify the basis of their claims about superior knowledge and the ignorant public. The purpose of this discussion has not been to extend or add to these arguments, but to point out the expert-lay distinction requires a clearer articulation about the basis for these comparisons.

2.3.3 Challenging a consensual and static view of economics

My second challenge to the status of economics in relation to the expert-lay distinction relates to the apparent straightforwardness of deriving an essential or representative economics to use to compare economists and lay people. As someone writing from another social science department, political science, the idea of an essential disciplinary "politics" is surprising and requires further analysis. Would an essential or representative disciplinary politics make any sense? Yes, we could construct a basic test of knowledge about New Zealand political institutions and practices (e.g. parliamentary term lengths or the name of the Prime Minister), but as soon as we stray to anything laden with the theories of scholars of politics, things become much more contentious. Academics who study political phenomenon gravitate to different theoretical perspectives and take different philosophical positions about what they are doing (Hay, 2002). Terms used by political scientists, "democracy" or even "politics", are highly contested. For the studies comparing lay people with economists at least, the task of determining a representative or essential version of economics appeared to be non-problematic.

Of course, like other social sciences, economists are not all intellectually united. That economists disagree is an idea reflected in jokes and popular commentary on economics. For instance:

Gunnar Myrdal, a socialist politician, shared the [Nobel] prize in 1974 with Margaret Thatcher's inspiration, Friedrich Hayek. This provoked the joke that economics is the only subject in which two people can share a Nobel prize for saying opposite things.

(Harford, 2008)

Klamer emphasises debate as characteristic of economics, encouraging his reader to “think of economics in terms of a conversation, or, better yet, a bunch of conversations” (Klamer, 2007, pp. xiii-xiv). This “bunch of conversations” is recognised by the American Economic Association (AEA) in their taxonomy of economics subjects. For example, they differentiate neoclassical macroeconomics from approaches influenced by Marx or Keynes (American Economic Association, 2018). The studies comparing lay people with economists do illustrate economists disagreeing (Blendon et al., 1997; Caplan, 2001; Sapienza & Zingales, 2013a). Although there was common agreement on many survey items, there was divergence between economists on policy prescriptions and evaluations of economic trends.

Given that there are neoclassical economists, (new-, neo-, post-) keynesians, marxists, neo-institutionalists, happiness economists, ecological economists and so on, this sets up a problem: which (or perhaps whose) economics are we talking about? This is not the marxist, feminist or ecological economist's basic economics. Caplan (2002) did not study “Systematically biased beliefs about post-keynesian economics”. Some of the core ideas represented by “basic economics” are what these other economists argue with. For example, Marilyn Waring (1999), a New Zealand scholar and former parliamentarian who has been influential in the development of feminist economics, and Herman Daly (2013, 2014), a prominent ecological economist, both take issue with GDP as a measure, including what or who it does and does not measure, and economic growth itself, in relation to goals of improving human wellbeing and preventing environmental degradation. These scholars might not regard definitions of GDP or knowing the GDP growth rate as essential (or useful) economics for the lay person.

That there are different perspectives or that economists disagree, however, does not mean that economics represents a “free market” of ideas. And, actually this is an accusation against economics by its critics. That there are *heterodox* economists implies that along with economists representing

alternative, critical and perhaps marginal perspectives, there is also some kind of problematic *orthodoxy* to “heterodox” against. The open letter in 2014 from an international coalition of economics student associations exemplifies this accusation. The letter focused on a lack of “theoretical, methodological and interdisciplinary” pluralism in the economics curriculum (International Student Initiative for Pluralism in Economics, 2014). For example, economics curricula tend to place theoretical emphasis on “neoclassically-based approaches”, while “classical, post-Keynesian, institutional, ecological, feminist, Marxist and Austrian traditions” are neglected. Similar characterisations of a problematic uncritical orthodoxy were repeated in a number of editorials appearing in prominent publications following the global financial crisis (Fullbrook, 2010). Perhaps the most well-known was an article by economist Paul Krugman (2009) in *The New York Times* entitled “How Did Economists Get It So Wrong?” in which he described how, despite theoretical disagreements, there was a general consensus around what was acceptable macroeconomic policy among mainstream macroeconomists. Economists, according to Krugman, were blinded to the possibility of crisis by the “beauty” of their neoclassically-influenced models and assumptions.¹⁴

There is support for this kind of consensual view in the literature. Rubin, in his discussion of “folk economics”, states his confidence in a neoclassical orthodoxy plainly and questions the motives of people rejecting neoclassical economics and promoting rival, “incorrect theories” (2003, pp. 163-164). He confidently claims: “Theories competing with neoclassical economics are incorrect” and goes on in a footnote to say “If they are not, then I as the author and you as the reader of this paper are in the wrong business” (p. 164). Reinforcing the assumption of consensus, no critical reader is assumed.

The nature and existence of an orthodoxy is not straightforward. Krugman, in his post-crisis commentary on economics, claimed that the neoclassical approach constitutes the theoretical orthodoxy of economics as well as shaping the work of opposing theories by prescribing assumptions. Others, as already discussed, have argued that, rather than specific assumptions or theoretical

¹⁴ Similar criticisms were set out in the *Financial Times*, the *Atlantic*, *The Guardian*, *The Economist*, *Business Week* and other publications. For the full list, see Fullbrook (2010, pp. 90-91).

positions, it is the mode of enquiry that is the defining characteristic of modern economics (Colander, 2009; Lawson, 2005). Colander (2009), in fact, argues against the continued use of the term “neoclassical” to describe modern economics. However, putting aside what name-calling is appropriate, it is the stridency of orthodox economists in their advocacy that theirs is the “only (or almost only)” way to do economics that appears problematic, especially if the underlying nature of the phenomena they study is not conducive to the orthodox mode of enquiry, as their heterodox critics would argue (Lawson, 2005, p. 502).

In suggesting a “bunch of conversations”, Klammer (2007, pp. xiii-xiv) represents a plurality, however it is not just that there are multiple conversations, what counts as economics is arguably determined by the most prominent conversations. Power dynamics shape and exclude ideas and approaches at the core of the discipline. Some of these conversations are marginalised, as is represented by this observation from a group staging protests at the 2015 American Economic Association Conference:

Here, true academic debate among disparate schools of thought is a rarity. Not only do mainstream panels at the conference tend to exclude perspectives from outside the orthodox neoclassical framework, but the mainstream and heterodox panels take place in entirely different hotels.

(Kick It Over, 2015)

The conversations are not just unconnected, they are intentionally separated (and spatially in this case). The prestigious theorist and the prestigious theorist’s heterodox critic do not officially converse.

A 2015 paper, *The Superiority of Economics*, gives more context to this anecdote (Fourcade et al., 2015). The authors describe modern economics as both insular and hierarchical when compared with other social sciences. Their research based on reviewing survey research and their analysis of citation patterns in top journals, indicated that economists were much more negative about the value of interdisciplinary research than other social sciences. The authors also point out that, in contrast to other social sciences, faculty from the most prestigious economics departments were more likely to write textbooks, to publish in top journals and to take powerful positions in the most important

professional organisation for economists, the AEA. Supporting the claim that there are important core theoretical fundamentals, there appears to be consensus around what to teach PhD candidates, with economics courses at both undergraduate and graduate levels using “textbooks much more than other social sciences do” (p. 96). Although focused on the most prestigious US-based journals and institutions, and although other social sciences are potentially just less insular and less hierarchical, this study provides some context for claims about the underpinnings of consensus in economics.

An orthodoxy could be taken as a *sociological* reference point to compare with lay people, however this is necessarily also only an *historical* reference point. The substantial contribution by Fourcade (2009) on the historical development of economics in three national contexts, United States, France and Britain, demonstrates this point succinctly. The economics profession in each nation-state developed in distinct ways, with a distinct intellectual profile and a distinct relationship with the state. Economic knowledge and the role of economists is historically, politically and sociologically contingent.

Whatever its nature or underpinnings, ascribing an orthodoxy to economics suggests a staticness that is not realistic (Colander et al., 2004). If, however, economics is changeable then comparisons between economists and lay people appear much more arbitrary. Researchers who compare lay people with economists could argue that important economic concepts or entities are relatively stable, however representations of the core of economics are subject to change. As might be discerned by comparing a modern economics introductory text with one from the 1950s or 1890s, what constitutes the core of the discipline might render specific terms irrelevant at some future point. The truth of representations of economics is relative to some future representation. A present orthodoxy will always be relative to some future orthodoxy. Just like lay people now, current economists are in deficit of some future economics orthodoxy. Orthodox economists might one day recall the danger of policy derived from the errant economic knowledge of economists in the early twenty-first century.

Comparisons between economists and lay people imply that there is an economics, as in a representative or essential version of economics that lay people could know. If economics is characterised by differences, if it is historical and changeable, then the matter of deriving an essential or representative economics is not straightforward and requires justification by the economists and economic psychologists undertaking these comparisons. Appeals to objectivity, rationality and science are debateable, but these claims appear even more problematic in view of the way power shapes ideas at the core of economics. On the surface an orthodoxy appears to solve this problem of essentialising economics, however lay people's knowledge is then being judged relative to coincidence and power. Recognising changing debates and differences between economists provides less ground to make claims about lay people's ignorance, the usefulness of economics or the dangers of lay people's apparent ignorance. The studies that compare lay people with economists often assume this consensus and ignore dissensual voices. These studies are themselves an expression of orthodoxy.

2.3.4 Challenging the meaningfulness of the disciplinary frame

My third challenge to the expert-lay distinction relates to the meaningfulness of disciplines. Comparing lay people with economists *is* likely to reveal the disciplinary knowledge that lay people do not know, but this disciplinary frame is not likely to enclose what lay people think about economics, economic theories, entities, and so on. Rather than recording the inability of many people to pass an economics pop quiz, I suggest that if our interest is in lay people's thinking then we need a different logic of enquiry.

The preface to a textbook on economic psychology begins by stating:

The institutions of education – universities, libraries, learned societies – divide knowledge into convenient packages. ... Sometimes these divisions correspond to real distinctions in the world. Sometimes, however, they do not.

(Lea, Tarpy, & Webley, 1987, p. xix)

The authors are here appealing to the arbitrariness of disciplinary divisions in the academy. However, interestingly, their claim is its own kind of disciplinary claim, since they are arguing for removing the “artificial divide” between economics and psychology as rationale for the validity of another of these

“convenient packages”, namely economic psychology (p. xix). Their point about the arbitrariness of disciplinary divisions is pertinent if we think about whether these divisions are in fact meaningful to lay people.

When comparing lay people and economists the disciplinary frame is foregrounded and the naturalness of disciplinary categories and thinking disciplinarily is assumed. Economists mark out disciplinary boundaries in textbooks, conference papers, university courses and so on, but these boundaries are not obviously meaningful to lay people and they are unlikely to encapsulate the boundaries of lay knowledge. For example, as was revealed when reviewing the research comparing lay people with economists, there were ethical concerns (e.g. fairness) that appeared influential when lay people were thinking about economic issues (Haferkamp et al., 2009). Similarly, Webley (2005), discussing how children make sense of specific economic issues, mentions the importance of broader social and political dimensions that a child might take into account and provides an example to illustrate this. To understand differences in wages between men and women, Webley argued a child might think about supply and demand, but they might also “use concepts like power, take into account institutional arrangements, and place the current situation in historical context” (p. 64). While different, arguably marginal, perspectives in economics attend to power, institutions and history, the full range of a lay person’s analysis of economic issues is likely to be missed if the focus is on some abstraction of disciplinary knowledge.

The naturalness of disciplinary categories reflects and forgets the history of academic disciplines. This lack of equivalence between disciplinary knowledge and lay people’s beliefs is likely to be an important characteristic of lay people’s thinking. If disciplinary knowledge is a poor reference point for lay people’s beliefs, then studying lay people’s deviations from disciplinary knowledge reveals this as a disciplinary kind of enquiry. If we are interested in lay people and the way they think about economics, then research into lay people’s beliefs requires a different logic of enquiry, one that is more open-minded to the scope of lay people’s thinking about the economic domain.

2.4 Jurisdictional claims, depoliticised economists, and politicised lay people

I will now contextualise the claims inherent in the research on lay people's economics that privileges this disciplinary perspective. The substantial contribution of Andrew Abbott (1988) on the "system of professions" is relevant to begin understanding the nature of the claims being made through this comparative research. The theoretical framework articulated by Abbott focuses on the relatedness of the professions and the struggle between professions:

The professions [...] make up an interdependent system. In this system, each profession has its activities under various kinds of jurisdiction. Sometimes it has full control, sometimes control subordinate to another group. Jurisdictional boundaries are perpetually in dispute, both in local practice and in national claims. It is the history of jurisdictional disputes that is the real, the determining history of the professions. Jurisdictional claims furnish the impetus and the pattern to organizational developments.

(p. 2)

Although he does not address the position of economics and economists directly in his case studies, Abbott's emphasis on the role of "jurisdictional claims" by professions are crucial in his formulation and relevant to understanding the research on economists and lay people.

It is useful to revisit aspects of the preceding arguments from this perspective, understanding the way economists and lay people and their respective knowledge are represented in this research and how this research functions as its own kind of jurisdictional claim. Assessing whether lay people's knowledge reflects a set of economist-approved knowledge predetermines an "ignorance" finding. While Abbott's focus is the interrelatedness of the professions and the competitive system between them rather than the relationship between experts and laity, when discussing "claim[s] directed at the public] for the legitimate control of a particular kind of work" (p. 60), Abbott states:

Claiming public jurisdiction of tasks is a pervasive activity. The advice columns of newspapers and magazines are familiar vectors of these claims, as are the perennial "what laymen need to know about the law" (or medicine or taxes) handbooks published by or for professional associations. By revealing to the public some of its professional terminology and insights, a profession attracts public sympathy to its own definition of tasks and its own approach to solving them.

While perhaps not exactly directed at attracting “public sympathy”, research that compares economists and lay people is used to make a related jurisdictional claim: the public need economists to protect them from their own dangerous ignorance.

Abbott provides further insight into why economists and their knowledge is presented in the way it is in studies by economists. He suggests that the kind of abstract knowledge developed by an academic discipline is important in enabling and sustaining jurisdictional claims (pp. 53-54). The interest in studies of economists and lay people is the disciplinary knowledge that lay people do not know *not* illuminating what lay people think and where these ideas come from. Abbott also identifies a tendency to represent professions as homogenous as a feature of public jurisdictional claims:

In the public arena, the nature of discourse about jurisdiction is sharply constrained. Public discourse must concern homogeneous groups. All doctors are equivalent, all nurses are equivalent. There is no distribution within the groups—no variation by skill, by specialty, by training. [...] Public jurisdiction concerns an abstract space of work, in which there exist clear boundaries between homogeneous groups. Differences of public jurisdiction are differences between archetypes.

(p. 61)

With few exceptions (for example, see: Rubin, 2003, pp. 163-164), the literature by economists on lay people is silent on non-mainstream theoretical perspectives and there is no deep consideration of the various vocational categories economists inhabit (e.g. academic economists, professional economists working for financial institutions or governments). Economists are presented as if in agreement on what constitutes their knowledge (and this appears to be reflected in survey research) (Blendon et al., 1997; Walstad, 1998; Sapienza & Zingales, 2013a). When variation in lay people’s perspectives is emphasised, it is in relation to some economist-like knowledge (for example, “what makes people think like economists?”: Caplan, 2001).

Comparing lay people with economists appears problematic and arbitrary if we take seriously the challenges I have set out. Rather than just arbitrary, drawing on the insights of Abbott, what is perhaps distinctive about the kinds of jurisdictional claims being represented in much of the research that compares economists with lay people, is the claim is for control over a domain of decision-making that has until recently been understood to reside with “the public” in liberal democracies

through their representatives in legislative bodies and the public service. I would suggest that these studies actually exemplify a more pervasive orientation that positions the decisions of economic experts as beyond politics. I suggest that comparisons between economists and lay people are to make a political point about economists privileged position with respect to the decisions of the polity. Claims that economics *applied* is beyond politics should itself be understood as its own kind of political claim, a claim about how decisions should be made in the polity. That economics *applied* is not political can be challenged though.

Murray Edelman (1977, p. 136) describes the rhetorical positioning of specific kinds of issues as “professional or technical in character” to justify a technocratic form of decision-making as “antipolitics”. Most simply stated, technocracy is *rule by experts*. More recently, a number of political thinkers (for example, see: Rancière, 1999; Žižek, 1999; Mouffe, 2005; Crouch, 2004) have diagnosed a trend in current political thought and practice to promote a technocratic mode of politics that denies the possibility of alternatives. The basis for this “post-politics” is an “unquestioned framework of representative democracy, free market economics, and cosmopolitan liberalism” (J. Wilson & Swyngedouw, 2014, p. 6). Slavoj Žižek (1999, p. 198) argues that “post-politics” denies the relevance of ideological conflicts of left and right, promoting instead a consensual form of governance that privileges expertise, “enlightened technocrats (economists, public opinion specialists ...) and liberal multiculturalists”.

Integral to this post-politics is the assumption of a non-political, as in a non-contestable or non-controversial, economics. Žižek (1999, p. 353) describes this as “the radical depoliticization of the sphere of the economy” where “the way the economy functions ... is accepted as a simple insight into the objective state of things”. However, this is more than a set of ideas, ensuring the robustness of this thinking through the crises of the last decade, these ideas have become codified and institutionalised. the epitome of this being actions to reconfigure future monetary policy by transferring this responsibility from elected governments to technocrats in central banks (J. Wilson & Swyngedouw, 2014, p. 8). Entrenching these ideas has involved political decisions by elected political leaders.

Just as economics is assumed to provide a rational calculus for actions by the state, the literature that compares lay people with economists promotes the view that if lay people could just internalise this same economics, then they too would possess the rational calculus for correct political decisions. My proposition is that this literature constitutes an example of the claim that economics is beyond politics and advocacy for a technocratic form of politics. Relatedly, this is a form of enquiry that politicises lay people with respect to economics and political decision-making, positioning democratic participation that deviates from economists' prescriptions as controversial. The political point follows directly from the comparisons being made between lay people and economists.

There are prominent examples of this kind of advocacy in the literature. Walstad (1998), for example, expressed concern that people surveyed neither understood monetary policy or who should set it. It was self-evident that there be “an independent central bank, isolated from direct political pressure, that can effectively control the money supply and maintain price stability”.¹⁵ The deficiencies of the public misunderstandings of an ideological positioning of economic policy beyond politics was part of an argument for the necessity of educating citizens about economics. Likewise, Caplan (2006) draws on the finding that the public deviates from economists' policy preferences to argue for “Correcting Democracy”, specifically by arguing against voter turnout campaigns, and for preventing the economic illiterate from voting (or giving more votes to the economic literate).

The unstated rationale for the meaningfulness of the disciplinary perspective is the assumption that economists are privileged with respect to political decisions. Given the critical issues in relation to economic expertise that I have discussed, this is problematic, but is also problematic in how it understands the politics of economics *applied*. To counter the claim of an economics beyond politics it is useful to return to the question of the scientific status of economics. To challenge the potential of scientific social science theories, Bent Flyvbjerg (2001) draws on Aristotle's distinction between *episteme* and *phronesis*. *Episteme*, translated as “scientific knowledge” (p. 55), is concerned with the kind of knowledge that is “[u]niversal, invariable, [and] context-independent” (p. 57). In

¹⁵ Further research is required, but there are indications that the Federal Reserve Bank of Minneapolis, which published this piece by Walstad, was active promoting the idea of central bank independence as basic economic literacy.

contrast, *phronesis*, sometimes translated as “practical wisdom”, is both “context-dependent” and value-laden, concerning action in a specific situation, where the good or right thing to do is a matter for deliberation (p. 57). *Phronesis* encompasses the domain of deliberations related to the polis. This understanding of politics is exemplified by Benjamin Barber’s “political question”:

What shall we do when something has to be done that affects us all, we wish to be reasonable, yet we disagree on means and ends and are without independent grounds for making the choice?

(1984/2003, pp. 120-121)

This distinction between *episteme* and *phronesis* is useful to think about the political nature of economics in two respects. First, as Flyvbjerg does, it can be used to critique a conception of social science as *episteme* or scientific by highlighting the problem of developing general theory free from context. As already discussed, Flyvbjerg argues that social scientists are challenged in developing context-independent theory because the phenomena being theorised includes actors whose actions are context-dependent. Flyvbjerg’s response is to position social science, economics included, as *phronetic*.

However, the *phronesis-episteme* distinction is also relevant in a second respect because economics *applied*, which are decisions to act according to economic theory in a manner that is binding on others, belongs to the domain of *phronesis*. At the point that we could start debating economics *applied* (involving questions like, should we act or not? how specifically should we act? when should we act? and so on) this has become a political question. There are different ways this claim can be justified. Firstly, economic theories are at best probabilistic in terms of whether predicted outcomes will occur or the degree to which they will occur. Whether or how this unpredictability should affect decisions is a matter for deliberation. Secondly, economic theories are not theories of everything; they relate to certain phenomena and by implication exclude other phenomena. It is likely that acting according to an economic theory will result in other outcomes not predicted or not predictable by that theory (for example, see discussion of “social engineering” in: DeMartino, 2011, p. 4). They do not establish definitive grounds regarding whether to act or not, they only purport to predict the results of acting in terms of a narrow set of outcomes. Put another way,

although economic theory may be relevant to practice in a general sense, the relevance and application of economic theory in a specific situation is a matter for debate.

As grounds for action economic theory is limited. When we move from the economics of the lecture theatre or textbook to the “real world”, we cross from the myth of *episteme* to the context-dependent judgments of *phronesis*. Economics *applied* is a political matter that is open for contestation and debate. It should be noted, that this positioning of economics *applied* as political applies even if we discount the critiques of economics and economic theory I have outlined, and to assume there is such a thing as good or correct economic theory. Asserting that economics *applied* is beyond politics is itself a political claim. Similarly, asserting the primacy of a narrow set of outcomes predicted by economic theory over others should also be viewed as a political claim.

To conclude, while I have argued that economists are not a good reference point for lay people these comparisons should be understood as an expression of more pervasive arguments for the privileging of economic expertise. The politics of economic knowledge is therefore an important context to appreciate if we wish to understand lay people’s theories of the economy. Rhetorical moves to depoliticise economics is its own kind of political advocacy. This further indicates the need to think critically about the disciplinary assumption underpinning researchers’ orientation to studying lay people’s “economics”.

2.5 Summary

In this chapter I examined scholarship that approaches the study of lay people’s theories of the economy from a disciplinary view *from the Academy*. This research certainly indicates that lay people do not know what economists know or think like economists. In some of the studies, when lay people veer from economists’ preferences they also err and this is typically articulated as a problem for the political community. I challenged the relevance of this lens for understanding lay people’s thinking by considering the basis for claims about economists’ expertise, the difficulties essentialising economics, and the problem of drawing boundaries around “the economic”. I suggest the self-fulfilling nature of this research represents a jurisdictional claim and a political claim. This contextualises research

promoting lay people's divergence from economists as a problematic kind of "ignorance" in relation to a wider ideological context which denies the politics of economics *applied*.

This discussion draws attention to an assumption that is also a feature of the academic literature that studies lay people's beliefs without an explicit disciplinary reference point. Specifying and challenging this disciplinary assumption is important in differentiating the interdisciplinary and critical perspective that I am progressing in this thesis from previous research. The analysis in this chapter has dealt with the question of expertise and why this thesis is not conducting another test of economic knowledge. The discussion indicates that if researchers are interested in lay people and their thinking, then they should rethink the basis of these enquiries. This indicates that economists and psychologists should be more open-minded to the scope of lay people's thinking about the economic domain.

Chapter 3 From *in the head* to “in the wild”: Lay people’s theories of the economy and the rhetoric of the economy

3.1 Introduction

The last chapter addressed the inescapable issue of the knowledge of economists in relation to lay people’s thinking and identified the limits of studies that foreground a disciplinary perspective. In challenging the view *from the Academy* I also argued that research that problematises lay people’s knowledge without a critical stance on the knowledge of experts represents its own kind of political intervention in ongoing debates on the (de)politicisation of economic knowledge.

In this chapter I challenge a second key assumption common in academic treatments of lay people’s economic thinking, which is that despite differences in terminology and theoretical orientation, lay people’s theories of the economy are primarily understood as cognitive representations, *in the head*, with the locus of research being to reveal the nature of these individual-level phenomena (Furnham, 1988; Williamson & Wearing, 1996; Routh, 1999; Bastounis et al., 2004; Leiser & Kril, 2017). The researchers conducting this research have tended to take for granted the notion that there *is* an economic sphere that is *psychologically separable* and embed this assumption in their research, thereby neglecting the deeply political nature of economic ideas in practice.

In contrast, drawing on rhetorical psychology (Billig, 1987, 1991; Condor et al., 2013), I propose to address this neglect by reconceptualising lay people’s theories of the economy as action oriented to a context of ongoing public debate. This reorients the study of lay theories from a phenomenon that is assumed to be *in the head* and/or best understood *from the Academy* to one that is much more closely related to the context of public argument and a history of ideas and action. This shift in focus sets up the methodological requirement to take seriously the rhetoric of the economy “in

the wild” (Finlayson, 2007, p. 552), both to explore the context of lay people’s thinking and to directly observe lay people thinking about the economy. This argument is crucial for setting out a revised rationale and approach for this research.

3.2 Research on lay people’s theories of the economy: four key findings

In this section I discuss the findings of previous research that, in contrast to the literature discussed in the last chapter, is less concerned with comparing lay people’s theories with economists’ theories, and instead is oriented to understanding lay people’s thinking in relation to what we can broadly refer to as “the economic”. This signifies a move away from the interests of economists in what lay people do not know, to what has typically been the concern of psychologists.

In the discussion to follow I draw out and structure key findings of work that is relevant to understanding and rethinking *lay people’s theories of the economy*. Where relevant I will integrate and synthesise findings from the research reviewed in the last chapter on lay people’s understanding of economists’ knowledge. Most basically, there is general acceptance of the finding that lay people lack knowledge of what economists know (for example, see: Furnham, 1988; Vergès & Ryba, 2012). The distinction I have made between research prioritising (and typically problematising) differences between economists and lay people and research on lay people’s beliefs in the economic domain is useful, not least because they alert us to problematic assumptions related to economics as experts and lay people as non-experts, assumptions that are also sometimes demonstrated in the studies I am now reviewing. However, the distinction is problematic because the former (comparing lay-economist) is defined by procedure, while the latter is defined by content (lay people’s beliefs) and there are studies that straddle this distinction. For example, although Leiser and Aroch (2009) involved comparisons with economists it still has fascinating insights for understanding the way lay people think about macroeconomic causation.

3.2.1 Lay people *can* think about the economic domain

The first finding to foreground is that, although lay people appear to lack an understanding of economists' concepts and theories, there is evidence from lay people's interactions with researchers in a number of studies that they can think about the economic domain (Salter, 1986; Williamson & Wearing, 1996; van Bavel & Gaskell, 2004). It might be expected from a reading of the literature on lay people's impoverished understanding of what economists' know that for the lay person the economic domain is a psychological "terra nullius" or a realm of confusion (Williamson & Wearing, 1996, p. 6) or subject to the regularities related to the limits of human cognition but characterised by a "lack of explanatory depth" (at least in terms of the legitimate knowledge of economists) (Leiser & Aroch, 2009, p. 13). However, a range of studies, and especially those "that allow respondents to define their own lay theory" (Bastounis et al., 2004, p. 274), reveal that lay people can reason about the economy with a degree of complexity and coherence (Williamson & Wearing, 1996; van Bavel & Gaskell, 2004). One early study went as far as to attribute to lay people: "relatively coherent ways of thinking about the macroeconomy" (Salter, 1986, p. ii).

Arguing for the complementarity of surveys and methods that allow open responses, Williamson and Wearing (1996, p. 36) compared data collected from surveys and "clinical interviews" and concluded that lay people's thinking exhibited both consistency and complexity. In addition, they claimed that "only in isolated instances during clinical interviews did anyone make an incorrect statement" (p. 33). It does indicate that people may be less likely to commit themselves verbally to claims they are uncertain about.¹⁶

3.2.2 Lay people evaluate the economic domain

A second important finding concerns the tendency for lay people to demonstrate an evaluative stance to the economic domain. In the last chapter I mentioned the argument of Leiser and Aroch (2009) that, when making inferences about macroeconomic causation, lay people have demonstrated a tendency to

¹⁶ An important implication of this is that research procedures that commit participants to respond, and in some instances guess, potentially contrive the answers that the kinds of research discussed in Chapter 2 have been ready to problematise.

align good causes with good outcomes, referred to as the good-begets-good heuristic. This regularity is obviously interesting, but this also suggests that lay people's thinking in the economic domain is fundamentally evaluative, in that: "[e]conomic events are classified as good or bad, not as neutral components in a causal system" (p. 12). Support for this idea is provided by Williamson and Wearing (1996, p. 36), who found that, when asked in general terms about the functioning of the economy, lay people did not produce neutral accounts of causality but rather focused on the problems of the economy. That lay people do and can evaluate the economy is a basic tenet of the large body of literature on the "economic vote", which suggests that citizens' support for political leaders is dependent on these evaluations (Lewis-Beck & Stegmaier, 2013, 2007; Duch, 2007; Lewis-Beck & Paldam, 2000; Nadeau, Lewis-Beck, & Belanger, 2012). Some of the studies that compare economists and lay people attempt to measure these good/bad assessments or presuppose these evaluations (for example, asking what policies are "good for the economy" (Blendon et al., 1997, p. 400; Caplan, 2001).

3.2.3 National differences indicate the social nature of economic thinking

There is evidence for national differences in the way lay people think about the economic domain, which in turn implies the shared and social nature of lay people's thinking (at least in terms of other citizens of their nation-state). Whereas much of the research comparing lay people with economists has been conducted in the United States, research relevant to lay people's theories of the economy has been conducted in a variety of specific locales, including Australia (Williamson & Wearing, 1996), Israel (Leiser & Aroch, 2009), and Chile (van Bavel & Gaskell, 2004) and other research has compared the beliefs of citizens of different nations (Vergès & Ryba, 2012; Allen, Ng, & Leiser, 2005). Research on social representations of the economy has been particularly revealing with regard to this, because social representations theory explicitly emphasises the social and shared nature of thinking (Vergès & Bastounis, 2001; Tyszka, 2001; Zappalà, 2001; Dehm & Müller-Peters, 2001). This national character of lay people's theories was also a finding of Williamson and Wearing (1996, p. 25) who indicated that the economic problems people were attending to were the economic

problems of Australia and drew on shared beliefs about Australians.¹⁷ These findings, that lay people demonstrate beliefs shared by other citizens of their nation-state, cannot be explained simply with reference to their differentiated knowledge or the general cognitive limits of non-experts.

3.2.4 More than economics: the multi-dimensionality of lay people's theories of the economy

The fourth finding is that there is evidence that lay people's thinking is multi-dimensional, meaning lay people apply non-economic knowledge and reasoning when they think about the economic domain (Williamson & Wearing, 1996; van Bavel & Gaskell, 2004; Vergès, 1987; Furnham, 1988). This finding potentially addresses the apparent contradiction identified by Leiser and Aroch (2009, p. 12), that despite a shallow understanding of economists' knowledge (something lay people themselves seem self-aware of), they are willing to make causal inferences about macroeconomic variables. In contrast to the "superficial approach" (p. 12) that the authors ascribe to lay people to reconcile this contradiction, the "good-begets-good heuristic", it appears that lay people only tend to lack explanatory depth with respect to *economic* explanation and are capable of explaining economic phenomena in terms they are more familiar with, namely: "psychological, social and moral variables" (Williamson & Wearing, 1996, p. 34). A striking example of this already discussed is the tendency for lay people to attend to fairness as a decision-making criterion when evaluating economic policy (Haferkamp et al., 2009; Jacob, 2012).

3.3 The closure of political context in the search for the cognitive economy and indications this matters

In this section I interrogate the tendency to treat lay people's "economics" as primarily an individual-level cognitive phenomenon and how this assumption has been reproduced in the way economists and psychologists approach their research and the problems related to it for our understanding of lay people's thinking. In making this criticism I draw on the rhetorical critique of attitudes (Billig, 1987,

¹⁷ Actually the question people were asked explicitly addressed their thinking to Australia (Williamson & Wearing, 1996, p. 8). Although Williamson and Wearing (1996, p. 33) found gender differences in cognitive maps, there were not the systematic differences they had anticipated, and they commented on the shared nature of lay people's thinking, stating: "there were far more similarities of thought among the total sample than there were differences".

Chapter 7), which should be situated in a tradition of critical social psychologists who problematise the neglect of social and historical context (Hepburn, 2003, see Chapter 2; for example, see: Moscovici, 1972). Using Bastounis et al. (2004) and Williamson and Wearing (1996) as examples, I argue that previous research has tended to decontextualise people's responses from the background of political controversies and debates. I foreground findings and discussion from past research that indicates the relevance of social and political context for understanding lay people's thinking about the economy, including research in the social representations tradition (Vergès, 1987; van Bavel & Gaskell, 2004). I conclude this section by considering the difficulty of conceptualising separable economic and political spheres and the relevance of attending to politics and political debate as a fundamental context for lay people's economic thinking.

3.3.1 How context intrudes and how it is backgrounded

As I began reading the relevant research, I was surprised that in much of the research, context appeared to matter in making sense of the results. However, the way enquiries were structured backgrounded this aspect. This is perhaps best illustrated by Williamson and Wearing (1996), who, in order to derive what they refer to as "cognitive models of the economy", asked people to verbally respond to the question: "When you consider how the economy affects the well-being of people in Australia, what do you think about?" (p. 8). Rather than revealing a complete map of lay people's thinking about the economy, they concluded that "cognitive models were models of dissatisfaction and concern" (p. 36). People were oriented to the specific problems of Australia at that time and they were often critical of the government. People seemed to talk about negative and controversial aspects of the economy rather than revealing everything they knew or believed about it when compared with survey data. Rather than simply mentioning government as a causal agent, people appear to have been criticising government, and rather than simply mentioning policy as a mechanism to effect economic change, people appeared to be taking a stance in matters of controversy. That when asked about the economy, people responded with grievance and political argument is an important finding that the literature to date has not properly attended to or theorised.

To critically examine these studies I will draw on insights of Michael Billig (1987, Chapter 7) in his rhetorical critique of attitudes. The crux of Billig's critique is his rejection of the idea that attitudes can be conceived as individual-level phenomena understood as an evaluative stance towards *something*. He argues that this ignores the "rhetorical or argumentative context" of such a stance (1987, p. 176). By this Billig means the action of taking a stance must be related to the matter that is at issue or subject to debate, as it "locates the individual in a wider controversy" (1991, p. 43) and, as such, taking a stance is "a statement of disagreement as much as of agreement" (1987, p. 177) since arguments imply counter-arguments that are being rejected. In other words, when a person says they are *for* something, this implies they are *against* something else. Furthermore, entering into an argument implies that people are ready to justify their stance and critique the opposing stance (1987, pp. 177-178).¹⁸

Disagreement, rather than being investigated explicitly, has typically been problematised, especially in relation to lay people's deviations from economists' knowledge (see Chapter 2). Nevertheless, we can apply this insight to reconsider and reinterpret previous research on lay people's theories of the economy, orienting attention to the dilemmas of the political community and specifically to disagreement. Obviously, this capacity to disagree materialises in survey items that ask people to agree or disagree on propositions about policy. However, what I want to foreground here is the difficulty in interpreting responses to questions when context is closed off. It could be that responses to an abstracted question actually reflect the political dilemmas faced by members of a political community, however there is no way to determine this. Most studies¹⁹ have asked questions that would have been controversial in the context of public political debate at the time, but interpreted these without reference to these debates. The most obvious examples of this being research that

¹⁸ In later work Billig (1991, p. 15) draws on the arguments and empirical work of discursive psychologists who are sceptical of the cognitive reality of attitudes as stable, observable behaviour originating out of "inner mental states". The research of discursive psychologists demonstrates "the rhetorical complexity of opinion-giving" (p. 16), that is that when people verbally express their opinions they take into account the context, which includes the utterances of the other participants in an interaction. The complexity and variability that can be demonstrated when people express their opinion is argued to follow from an understanding of speech as socially-oriented action (p. 170). This orientation to a specific social context is not social in a wider sense, because people draw on common-sense beliefs when they think and they also orient to controversies that transcend a particular social interaction.

¹⁹ Unlike other studies, Sapienza and Zingales (2013a, p. 637) identified questions they referred to as "political" in the sense that they were partisan in the US two-party system.

surveyed people about free trade soon after controversy surrounding the North American Free Trade Agreement (NAFTA) (for example, see: Blendon et al., 1997; Caplan, 2006). It is not clear that we can draw out generalised thinking about “free trade” even if the questions are phrased in a general way.

In order to illustrate this limitation of past research in more detail it is useful to more closely consider the survey-based study of Bastounis et al. (2004) and the analysis of unstructured interviews used by Williamson and Wearing (1996). The choice to focus on these two studies is not to imply that these are poor studies. These studies are useful because they approached the research in different ways and they outline their approach clearly and are self-critical when discussing method. As such, they can be analysed for problems that are found in other studies. In addition, in discussing the limitations of survey methods Bastounis et al. (2004) suggest employing techniques “that allow respondents to define their own lay theory” (p. 274) and they refer to Williamson and Wearing (1996) as a study that demonstrates this. Likewise, Williamson and Wearing (1996) and the doctoral research behind it (Williamson, 1992) are motivated by the limitations of survey methods in this domain and actually demonstrated this by comparing the results of a survey with responses to interviews that “attempt to describe lay theories of the economy, based on individuals' free discourse” (1996, p. 6). Specific aspects of these studies, when viewed critically, illustrate the relevance of looking beyond self-report methods when researching lay people’s theories.

The problem of obscuring argumentative context is most obvious in the wording of survey items and this is possibly compounded by the tendency to privilege and reproduce the abstractions, generalities and theorising of economics. To illustrate this here are some items mentioned by Bastounis et al. (2004, pp. 267-268):

In order to solve the problem of unemployment what should the government do?
 How would a dramatic increase in all taxes affect unemployment?
 What is the main factor that influences the rate of inflation?
 What will happen to inflation if the interest rate increases?

Businesses could provide more jobs, goods and services if they didn't have to pay so much in taxes.²⁰

It's no use worrying about the economy; I can't do anything about it anyway.

The poor and the ill have a right to help from the government.

Companies should only be allowed to charge a government-controlled price for their products.

The average worker today is getting less than his or her fair share.

We need a way to make incomes more equal in this country.

Half of the ten items listed mention government or taxes explicitly and many of the other items could easily be excerpted from a speech by a political leader. It is not difficult to imagine radical situations in which responses to these items could take on very different meanings let alone provoke different responses. For example, any of these items could have taken on a different meaning in the period during and after the global financial crisis or a period of rapid and radical economic reform. Even something routine in formal and institutional politics, like a Finance Minister presenting a Budget to Parliament that announces and rationalises new Government policy, could change the way people orient to the items listed above in that it provokes new debates and critiques and justifications.

In analysing such general statements people's reactions to these statements are dislocated from the historical and political context that gives them meaning. If we assume that the context of argument is important we have no clear rationale for interpreting responses to these items as general or specific. Furthermore, without digging into the controversies or debates that might locate a person's survey response as argumentative or not, it is difficult to distinguish people expressing something they understand is debateable from uncontroversial beliefs or even a guess.

This is also a risk of interview techniques, where, rather than relating these accounts to matters of controversy or debate at a specific time, there is also the potential to decontextualise people's responses, either embedding this into the interview procedure or obscuring this in analysis

²⁰ The wording of this item is especially problematic. It was described as an attempt to measure "trust in the business world as a reliable institution providing useful services and goods" (p. 268). Even considered from the perspective of survey-building best practices, this item is questionable. There is much to agree or disagree to in this question depending on how the respondent reads or understands the item. It is uncertain whether this question is assessing trust in business or an orientation to taxes or some perceived causal link between lower taxes and increased employment and production. Furthermore, it might take on a completely different meaning when a governing party is proposing tax cuts or during a period of low or high unemployment. The authors reported a low measure of internal consistency of the subscale that this belonged to.

and reporting. These problems can be illustrated in the relatively unguided approach that Williamson and Wearing (1996, pp. 8-9) describe:

To minimise the influence of specific questions on participants' responses, the only question asked by the interviewer was, "When you consider how the economy affects the well-being of people in Australia, what do you think about?" Only when participants said they could think of nothing else to say were they presented with a list of cues on a card, and asked to comment on any of them if they wished. Cues were the roles played in the economy by the public sector (government), the private sector (businesses), households and trade unions, taxation, spending, prices/costs, inflation, unemployment, saving, investing, profits, work, work incentives, wages, debt, imports, exports, productivity, interest rates and the value of the Australian dollar.

Although the question prompts people to talk about their political community, Australia, they are being encouraged to generalise about categories, both in the question ("people in Australia") and in the cues ("public sector (government)", "private sector (businesses)", "households", and so on). To construct the "cognitive models" verbal responses of participants were recorded and later coded to identify causal connections, evaluations and associations between mentioned "variables" (p. 11). Although this graphically illustrated (in a flow chart form) the complexity and variability of people's responses (pp. 22-23) and allowed responses to be compared and aggregated (p. 26) this also necessarily abstracts from and obscures what people actually said.

Beyond the difficulties in converting utterances into causal linkages,²¹ there are some indications that the way Williamson and Wearing approached analysis and reporting of their data might matter. Firstly, the extracts of participants' responses provided (pp. 11-13) were referring to an historical, social, and political situation. One described the present situation of the poor, as well as a specific stock market crash, while others demonstrated advocacy for or against specific kinds of government action. This is further supported by recalling Williamson and Wearing's observation that "cognitive models were models of dissatisfaction and concern" (p. 36). The responses reflect this negativity even though participants had been encouraged to engage in causal talk.

²¹ Even in the example utterances provided Williamson and Wearing (1996, pp. 11-12), there is problematic coding of what the interviewee said. The phrase "people are unable to live on them [welfare benefits] because of inflation" was coded to record a negative relationship between the variables "inflation" (cause) and "welfare benefits" (effect), although the person seems to indicate that inflation affects people's ability to *live on* welfare benefits.

Secondly, in the reporting of the results the authors generalise further away from the argumentative context. For example, they observed that government “waste” was attributed in part to “‘non-essential’ or ‘frivolous’ one-off projects, such as celebrations or the building of ‘monuments’” (p. 33). However, these celebrations and monuments were not abstract, imagined projects. The displayed data suggest that they were specific projects: “Government spending on Parliament House” and “Government spending on Bicentennial Celebrations” (p. 23; also see table p. 20). Parliament House was opened and the Australian Bicentenary was celebrated in the year the research was conducted. It is clear that some of the respondents were expressing their stances on current, public controversies related to these events. These stances do not necessarily express a conclusive position on government spending, other one-off projects, or infer anything about an underlying belief system or a fixed understanding of causal relationships. Furthermore, if these were “models of dissatisfaction and concern” would silence indicate ambivalence or agreement? Rather than some reflection of the structure of cognition, the monologues recorded may be better understood rhetorically as expressing one side of a dialogue, or more accurately, positions in public arguments. From a rhetorical perspective, there are risks with ignoring the possibility that interviews and other open-response techniques might be gathering arguments reflecting current debates or problems rather than some underlying cognitive structure.

The implication of the rhetorical critique is that there is a risk that self-report methods decontextualise lay people’s theories from the political ferment that are likely to give them meaning. In the previous chapter I suggested that there is a tendency to privilege a disciplinary view that separates out economics as a distinct sphere when studying lay people’s thinking. As this discussion indicates, there is evidence from past research that lay people theories about the economy are attending to political context. However, economists and psychologists studying lay people appear to actively decontextualise people’s thinking from the context of public debate and controversy and underestimate the politics of the economy and economic ideas. Because of this, it is potentially difficult to interpret responses and findings of past research. This is exacerbated by the way past research has treated discourse as an unproblematic way to measure or interrogate cognitive structures

or phenomena. As Billig (2006, p. 18) puts it: “when psychologists claim to be studying inner experiences they are, in fact, examining further discourse”. This suggests that we cannot treat people’s utterances as just an “aggregation of dictionary definitions of the words used” (Billig, 1991, p. 44), but should instead recognise the possibility, at least, that they are rhetorical acts in reaction to other rhetorical acts.

3.3.2 Research that acknowledges the importance of political context

Some psychologists *have* recognised that political context matters in understanding lay people’s theories of the economy (Furnham, 1988; Vergès, 1987; van Bavel & Gaskell, 2004). Most clearly this is in relation to, what I referred to in my review of the most relevant literature as the multi-dimensionality of lay people’s thinking. Relatedly, there are also suggestions that public discourse matters in relation to lay people’s thinking in the economic domain. In this discussion I am going to highlight the specific perspective of Furnham (1988) in his discussion of “lay theories in economics” and researchers who have applied social representations theory (Moscovici, 1984, 1988) to the study of lay people’s theories of the economy, specifically the research of Pierre Vergès (Vergès, 1987; Vergès & Bastounis, 2001; Vergès & Ryba, 2012) and René van Bavel (van Bavel, 2000; van Bavel & Gaskell, 2004) (and their collaborators).²²

Social representations theory would appear well-suited to study lay people’s thinking in the economic domain because of its original emphasis on understanding both the processes involved in transforming knowledge from specialist or scientific domains into common-sense and the nature of these shared, consensual “social representations”.²³ In fact, one of the early articles on social representations in English, Moscovici and Hewstone (1983, p. 115), referred to them as “common-sense ‘theories’ about key aspects of society”. More recently, social representations have been defined as:

²² It should be noted that the orientation of the social representations research is largely disciplinary, in that Vergès refers to other social representations scholarship but not to other research on “lay theories” and van Bavel (2000, p. 29) refers to Vergès and apart from a critical engagement with the work of Katona (1960, 1975), similarly ignores the relevance of related scholarship.

²³ The original study by Serge Moscovici (1961/2008; originally published in France in 1961) examined how the ideas and language of psychoanalysis spread into common knowledge and usage in French society and affected the resulting shared representations.

ideas, thoughts, images and knowledge which members of a collective share: consensual universes of thought which are socially created and socially communicated to form part of a 'common consciousness'.

(Augoustinos, Walker, & Donaghue, 2014, p. 36)

The emphasis on a social understanding of thinking is clear. The theory developed as a response to social psychological research that tended to individualise thinking and abstract thought from its social and historical context (Augoustinos, 1981, p. 11). And, this is something it has in common with rhetorical psychology because in the turn to emphasise "social factors" there is also a shift to attend to language (Billig, 1991, p. 14). In fact, Moscovici (2001, p. 29) has stressed that "a social representation is *discursified* thinking, that is a symbolic cultural system involving language". Linguistic interaction is viewed as fundamental to the process of transforming the unfamiliar, specialist concepts into familiar, common-sense "things" (Moscovici, 1984).

In relation to what I have called the multi-dimensionality of lay people's thinking we have contrasting depictions. Furnham (1988, p. 148) raises the interrelatedness of economic and political beliefs, commenting that "[i]t is not always easy to disentangle lay economic and political theories as they are frequently related" and sustaining this string metaphor by stating that "[l]ay economic theories seem very closely bound up with other lay beliefs, particularly political and moral beliefs". Furnham's conception, and the separability he implies, closely follows from his conceptualisation of lay theories as "belief systems" (1988, p. 19) and, echoing the kind of disciplinary thinking critiqued in Chapter 2, the assumption that lay people's belief systems align in some way to the researchers own conceptualisation of the domain and that their belief systems include knowledge that is properly the authoritative domain of economists.

Accounts influenced by social representations theory instead link this multi-dimensionality to the key assumption that social representations function to "make something unfamiliar ... familiar" (Moscovici, 1984, p. 24) and so people relate what is unfamiliar to existing socially shared ways of understanding (p. 29). Applied to the social representations of the economy, people are argued to come to understand new economic ideas and concepts in terms of existing social knowledge. So, Vergès (1987, pp. 272-273) makes it clear that "economic representations" are not purely economic in

nature and depend in part on “cultural matrices of interpretation”, which are the pre-existing socially-shared beliefs of a social group. And, it is in reasoned discourse related to the “economic field” that we see this relatedness and the problems of separating the “tangle” of economic/social/political because lay people rely on “fields of interpretation” that have social, political and ideological origins (Vergès & Ryba, 2012, p. 234).

In their focus on reframing of the distinction between experts and lay people, van Bavel and Gaskell (2004) offer another account. They propose two “modes of economic thinking”: the “systemic mode” associated with experts and the “narrative mode” characteristic of lay people (p. 423) and, in the case of the latter, lay people are argued to construct narratives to make sense of economic phenomena by drawing on the “shared stock of knowledge” (p. 436). Exemplifying this, van Bavel (2000, p. 184) found that when lay people talked about the economy they tended to draw on more familiar ideas about their political community, the nation-state (e.g. national pride or nations competing), rather than the expert’s systemic conception and language related to the economy. These modes of thinking were situated in Chile in the 1990s in the aftermath of an authoritarian regime that had imposed rapid and radical “neoliberal” reforms without debate or public consent (van Bavel & Gaskell, 2004, pp. 423-424) and they emphasised that experts in particular assumed the naturalness of neoliberal ways of understanding. And, while lay people were also influenced by neoliberal thinking, there was evidence of lay people disputing predominant ways of thinking about the economy, especially by drawing on narrative modes of reasoning. This indicates that it is the grounding and orienting to the problems of a political community that is reflected in the multidimensionality of lay people’s thinking.

Public discourse appears crucial in relation to this. Furnham has suggests that lay people both debate issues related to the economic domain and are the audience of debate in the media (1988, pp. 125-126, 148). On the former, he states:

Studies on lay theories and understandings of economics have shown that lay people are not particularly well informed though they tend to debate economic issues fairly frequently. Indeed, it is

precisely because economic conditions have such an immediate and noticeable impact on ordinary people's lives that they are so frequently debated.

(1988, p. 148)

For Furnham, that lay people debate economic issues appears to be evidence of the existence of underlying lay theories and a functional understanding of lay theories for “how people make sense of the social world” (1988, p. 9). In terms of the public debate in the media, he suggests that the media is important in bringing ideas about the economy and economic problems to lay people's attention, and in fact indicates that this may motivate lay people's discussions and shape their beliefs. For example, he states that “people may be exposed to popular and professional economic debate” about economic problems, “which they may assimilate (or distort) into their private model or theory about how the economy works” (1988, p. 148). Public discourse is therefore argued to influence people's cognitive structures of beliefs about the economy, contributing to the formation of more or less functional cognitive representations (which can then be studied in their own right) (for the most recent articulation of this, see: Leiser & Kril, 2017).

As already mentioned, social representations theory also emphasises language and van Bavel (2000, p. 52) reproduces the classic social representations view of communication both as medium for disseminating and as context for creating what are essentially consensual representations (van Bavel, 2000, pp. 229-234). The work of Vergès emphasises that lay people are influenced by “discourse diffused through conversation and the media” (Vergès & Bastounis, 2001, p. 20) and relate their thinking to this public discourse by “[adopting for themselves] what others have said before” (Vergès, 1987, p. 292). Although he refers to this public discourse as “practical ideology” (Vergès & Bastounis, 2001, p. 20), this is not a deterministic conception of purely ideological thinking and, in contrast to the more consensual socially-shared beliefs, he indicate that public discourse is dissensual, referring to it as “the ideological debates of the moment” (Vergès & Ryba, 2012, p. 234).

In highlighting public debate, Furnham also draws attention to the specific persuasive tactics of politicians, pointing out that: “[p]oliticians naturally attempt to persuade people to adopt their particular view of how the economy works and which economic issues are relevant” (p. 126). To

illustrate this Furnham discusses two specific metaphors that British politicians used in the 1980s to advocate action in relation to the economy.²⁴ Conservative politicians at the time used the metaphor of the economy as a *household* to argue for reduced spending and borrowing, while Labour politicians used a *body* metaphor to foreground the interdependence of the parts of the economy and to argue for intervention to restore health.

While Furnham raises metaphors as an “attempt to persuade”, other psychologists foreground the sense-making quality of metaphors in relation to thought. For example, in their recent review, Leiser and Kril (2017, p. 142) cite Furnham’s discussion of metaphor but background the rhetorical nature of their use, referring to metaphor as an important “way people handle the complexities of the economic world ..., the assimilation of the intractable issue to a familiar domain whose structure is better understood”. In this conceptualisation, and consistent with the arguments of Lakoff and Johnson (2003), conceptual metaphor is argued to be a fundamental feature of cognition.²⁵ The sense-making function of metaphor is also emphasised in the social representations accounts and both Vergès (1987, p. 272) and van Bavel (2000, p. 151) describe the use of the *household* metaphor in distinct national contexts (with different national languages I should add). In particular, van Bavel (2000, pp. 128-129) highlights metaphor in relation to representations favoured by experts: the economy as a machine or the economy as a body. These metaphors, and others, have also been highlighted in linguistic research on economic metaphors (Alejo, 2010; Quigley, 2011).²⁶

²⁴ Note that Furnham (1988, p. 126) refers to these as analogies.

²⁵ This proposed link between metaphor and thinking and its argued importance for effective progressive political communication has been popularised recently by George Lakoff (2004, 2008), who refers to this as “framing”. These conceptual metaphors are underpinned by cognitive structures that are shaped and reinforced by political discourse and must therefore be carefully considered in communicating for change (for application of this to communicating about social and environmental change, see: Crompton, 2010). A recent report by the New Economics Foundation (Afoko & Vockins, 2013) applies these ideas to examine the framing of the economy, identifying frames that underpin arguments for austerity and proposing alternative frames.

²⁶ The work of Dierdre McCloskey must be mentioned, as she critically explored the figurative language that economists in relation to the rhetoric of economics. As McCloskey points out: “Unexamined metaphor is a substitute for thinking – which is a recommendation to examine the metaphors, not to attempt the impossible by banishing them” (1998, p. 46). McCloskey (1995, p. 219) illuminates out that the models that economists develop *are* metaphors, but these metaphors are often not recognised as such: “Economists and other scientists are unselfconscious about their metaphors. They suppose that because they can speak an economic metaphor, it simply is. Economists are poets/But do not know it”. If economists are poets and do not know it, what about the lay person?

Each of these valuable contributions to our understanding of lay people's thinking in relation to the economic domain recognises political context in some way. Reading Furnham's account from a perspective informed by rhetorical psychology is interesting because he articulates the importance of public political debate, attempts by political leaders to persuade, the public context of controversy (e.g. what to do about economic problems) *and* indicates that specific arguments and even specific rhetorical techniques or features may influence thinking about the economy and economic phenomena. His emphasis on the theoretical importance of debate has much in common with the thinking of Vergès (and his collaborators). In contrast, van Bavel grounds his analysis in the context of the influence of a dominant ideology that oriented the political decisions of the powerful. In this respect, he indicates the importance of the power of experts and elites more generally with respect to public discourse and their power to influence lay people's thinking and actually effect material change. Furthermore, he reminds us that even if ideas and structural change are backed by the power of authoritarian rule, there is still the potential for disagreement and resistance.

Although both Furnham and Vergès are effectively indicating an argumentative context for lay people's thinking in terms of debate about economic problems and political action, this context does not appear to be especially relevant when it comes to going about the research or for interpreting the results of research. Both Furnham and Vergès emphasise the structure of cognitive representations, attending either to individual differences or socially-shared representations.²⁷ van Bavel does discuss the broader historical context in Chile and the context of the ideas motivating public policy. He also studied representations in media discourse along with interviews and focus groups with lay people and experts.

Furnham, by highlighting the use of a specific rhetorical figure, namely metaphor, and the use of rival metaphors indicates that there is a context of debate and attempts to persuade. Vergès and van Bavel also attend to metaphor, but the persuasive aspect is backgrounded and they are presented primarily as important to the sense-making function posited by social representations theory. The wider literature on metaphor (Charteris-Black, 2005; Lakoff & Johnson, 2003) highlights its

²⁷ van Bavel (2000, p. 32) critiques the "structural" orientation of Vergès.

ideological importance in shaping our understanding of a phenomena by foregrounding some aspects and backgrounding others. However, the mere fact of these rival metaphors in the case of Furnham, and evidence of lay people's criticism of these metaphors in van Bavel (2000) indicates that metaphors are not totalising, they become idiomatic and can be negated and countered (for discussion, see: Glucksberg, 2001; Billig & MacMillan, 2005).

If public debate is important to lay people's thinking, then backgrounding the persuasive quality could be problematic. Likewise, only attending to metaphor as a noticeable feature of public discourse could also be problematic.²⁸ In the tradition of scholarship on rhetoric there is more to persuasive talk than metaphor (for one significant account, see: Aristotle, 2007). This further indicates the relevance of specifically studying argumentative context in relation to lay people's thinking as advocated by rhetorical psychology.

3.3.3 Clarifying political context

When it comes to investigating lay people's theories about the economy it appears that politics intrudes, and I suggest must intrude. Even where recognised, this has typically not been addressed as fundamental to understanding lay people's thinking. What I am problematising is manifest as the under-specification or under-theorisation or under-emphasis on the political context of people's thinking. In discussing this neglect it is necessary to return to what we mean by *politics*. The implication of this analysis is to reveal some of the consequences of this neglect and, in turn, why it is important that a deeper understanding of politics is reflected in the way we approach the study of lay people's theories of the economy.

In Chapter 2 I proposed how distinctions between economics and politics are challenged when we think about economics *applied*. However, this is obviously not the conception that people writing about lay people's theories of the economy are typically relying on. Most scholars writing about lay people's theories in relation to economics or the economic domain use politics self-

²⁸ Leiser and Aroch (2009, p. 12) also concentrate on the sense-making problem of how "economically naïve people handle economic causal discourse to which they are constantly exposed" but similarly, while highlighting a specific example of evaluative language applied to the economic domain, are proposing people as information processors and economic discourse as a problematic kind of information people need to process.

evidently and imply a conception of politics in counter-distinction to economics. Although this notion of politics can be elaborated or contested, I would suggest that much of the research, accepting for a moment the way in which previous researchers indicate they understand politics, even neglects this narrow conception of politics. As indicated in the discussion of Williamson and Wearing (1996) and Bastounis et al. (2004), when researchers are asking people about the economy in questionnaires and interviews they also tend to ask people about government and government policy.

Inspecting lay people's theories of the economy appears to be also, perhaps inescapably, inspecting politics in terms of the narrow politics of institutions, processes and policies of the state. This issue extends beyond investigations of lay people and is reflected in academic and wider public discourse, as is evident in the research by van Bavel (2000). In addition to interviews and focus groups conducted with lay people or experts, they analysed media discourse. In reading over the article summaries in the appendix of his PhD thesis, it is clear that that the "economic articles" he analysed almost exclusively related to actors and actions related to the state and politics in this narrow sense (p. 113; see appendix pp. 264-285 for summaries of the news articles).

There are problems with assuming the separateness of the political and economic spheres as is indicated by drawing on Max Weber's (1978) classifications of economic organisations. As Weber observes, the institutions of the modern capitalist state both regulate and participate in economic activity (pp. 73-74). Even in the "pure laissez-faire state", which Weber proposes as a theoretical limit rather than an actuality, there could still be a role for state institutions "enforcing a formal order", for example by protecting property rights through a legal system. Thinking about this more specifically in a role that is integral to all monetary transactions, the institutions of the modern state both create and regulate money (p. 77). Beyond this function in relation to money, Weber classifies a range of ways state institutions could qualitatively impact on economic activity, including by raising funds to finance their activities (for example, through taxation), by fostering or regulating foreign trade, or even through power struggles within political institutions that impact on citizens' ability to consume or earn (pp. 193-194). This focus on the institutions and their activities and the way they generally shape economic activity challenges the assumption that when we are studying lay people's theories

about the economic domain that this can be considered distinct from the political sphere. That this narrow politics is implicated in regulating and participating in and shaping economic activity should inform our understanding of lay people's theories.

Politics, understood in this narrow sense, is meaningful and many political scientists would be content with this as a characterisation for what they study. However, it is important to appreciate that the nature of the *political* is contested (Hay, 2007). The conception of politics that is pervasive in the literature, which allows researchers to distinguish “the economic” from “the politics”, has been described as “politics-as-sphere” (Palonen, 2006, p. 11). This can be contrast with “politics-as-activity”, which emphasises that politics as a “contingent, controversial and temporal phenomenon” (p. 11).

This “activity” conception of politics was raised indirectly in the last chapter in indicating the political nature of economics *applied*, but now that I have addressed the wider literature we can see the broad relevance of this conception for this enquiry. This understanding of politics indicates that there are dilemmas that are “problems without solutions” (Finlayson, 2007, p. 550) because, on the one hand, there is no certainty about the consequences of action and, on the other, people will disagree about what to do with no objective basis to establish what course of action (or inaction) is correct or best. The understanding of politics as a controversial domain puts into perspective the comment by Williamson and Wearing (1996, p. 36) that “cognitive models were models of dissatisfaction and concern”. When people are orienting to “the economic” there is a fundamental sense in which they are orienting to politics, both politics-as-sphere and to the controversiality of politics-as-activity. This indicates the need when studying lay people's theories of the economy to attend to the context of political debate and disagreement.

3.4 Reconceiving the study of lay people's theories of the economy: the rhetoric of the economy “in the wild”

This thesis has, up to this point, interrogated key assumptions related to the study of lay people's theories of the economy. Despite these disciplinary and cognitivist assumptions, as discussed, there

are indications from the literature that thinking about the economy is a public and political kind of thinking. In this section I propose to reconceive lay people's theories in terms of a perspective informed by rhetorical psychology (Billig, 1987, 1991; Condor et al., 2013) and explain the implications of this position for how I approach this research. In this section I introduce a switch in orientation from studying decontextualised cognitive representations to the form and function of representing the economy in argumentative discourse. I then discuss the implications of this for how I will go about the research.

3.4.1 From representations to *representing*

The research that has engaged with lay people's thinking about the economy in a way closest to the one I am advocating is those studies informed by social representations theory (van Bavel & Gaskell, 2004; Vergès, 1987; Vergès & Ryba, 2012). In order to clarify how I am departing from previous research it is useful to engage with Gibson's (2015) recent discussion of integrating social representations theory and "discursive-rhetorical psychology". The discursive-rhetorical psychology term encompasses the various perspectives adhering to the discursive psychology and rhetorical psychology labels.²⁹ In this section I clarify how a perspective informed by rhetorical psychology departs from research that conceptualises lay theories as social representations.

Gibson does make it clear that within the diversity of perspectives denoted by discursive-rhetorical psychology and social representations theory there are perspectives that are more compatible and less problematic for synthesis, however, generalising about both, he argues that there are two points on which the perspectives diverge and could be integrated. According to Gibson:

It is argued that the focus on action in discursive and rhetorical approaches provides a lens through which we might view how social representations are used in specific social settings. Equally, the focus of social representations theorists on the 'sedimentation' of cultural themes provides one possibility through which discursive and rhetorical psychologists might be able to combine a focus on the micro-

²⁹ It should be pointed out that Gibson's article is not the first integrative engagement with these perspectives, which date back to the emergence of the rhetorical (and discursive) perspectives (Billig, 1991; Potter & Billig, 1992; Billig, 1993; Billig & Sabucedo, 1994). There is also integrative work more recently (Augoustinos et al., 2014; also, see: Billig, 2008).

interactional with the more diffuse cultural-historical processes that partially shape the objects of discourse.

(Gibson, 2015, p. 2)

In other words, he suggests that social representations theory could gain from discursive-rhetorical psychologists' approach to understanding discourse as situated rhetorical action, while discursive-rhetorical psychology requires the emphasis on social and historical origins of discourse that social representations theory offers an account of.

Gibson's criticism of discursive-rhetorical psychology as being typified by a close focus on discursive action and the concomitant neglect of social and historical aspects takes a side in a long-running debate among discursive psychologists about the level of analysis, or perhaps the nature of analysis, that is appropriate (Wetherell, 1998; Billig, 1999b). The target of this criticism are those discursive psychologists who employ conversation analysis and primarily focus on the "micro-interactional" level (Gibson, 2015, p. 2), but as Gibson acknowledges, Billig's own writings and research model attention to "a more ideological-historical level of analysis" (p. 7). Specifically, Billig has focused on the ideological and historical nature of common-sense, a concept he discussed as a potential point of cohesion or synthesis between social representations theory and rhetorical psychology (for example, see: Billig, 1997, p. 51). This criticism although arguably less relevant to Billig's contribution to the wider discursive-rhetorical body of scholarship, is relevant because it highlights points of commonality and more specific points of divergence between social representations theory and rhetorical psychology.

In terms of this cohesion, both social representations theory and rhetorical psychology direct theoretical and empirical attention to common-sense and this common-sense is understood as common to specific social groups and ideological, historical, and dynamic (Billig, 1987; Billig & Sabucedo, 1994; Moscovici, 1984, 2001).³⁰ Both perspectives claim the observability of common-sense thinking in its public manifestations (Billig, 1997/2013; Moscovici, 1988).

³⁰ Both Verges Vergès (1987) and van Bavel van Bavel (2000) have attended to ideology in some way in their analysis. Verges ideas come closest to Billig's in relation to a more dissensual view of ideology although this is largely obscured in analysis by his focus on finding consensual structures of representation. In contrast, van

To differentiate the rhetorical psychology perspective on common-sense from that described by Moscovici, Billig has emphasised both the rhetorical and ideological nature of common-sense. The concept of common-sense has special significance in the tradition of instruction on rhetoric: the orator, seeking to construct a persuasive argument, to justify their argument and to critique counter-arguments, was instructed to ground their appeal in the common-sense of their audience (Billig, 1991, p. 21). Billig states: “the common-places, which constitute important components of common-sense, provide the seeds of rhetorical arguments” (1987, p. 208). And, just as common-sense is the basis for public arguments, Billig argues it also provides the basis for thinking (1991, p. 72). When people think about the topics of debate and controversy, they are drawing on beliefs with a social basis to think or deliberate (1991, p. 20). This conception of common-sense depicts it as peculiar to specific social groupings and so in Billig’s view is “anthropological” (1987, p. 201)³¹ evoked by the Latin “*sensus communis*, or shared sense of the community” (2008, p. 358).

Billig’s conception of common-sense foregrounds the ideological nature and the dilemmatic nature of common-sense (Billig et al., 1988; Billig, 1991; Billig & Sabucedo, 1994). Common-sense is argued to include “assumptions which are so taken-for-granted that they are not even considered to be worthy of attention” and that these assumptions function to naturalise social relations as they “confirm the powerful in their position of power and which settle down the powerless into their respective positions of powerlessness” (Billig, 1992/1998, p. 13). Billig and his collaborators (Billig et al., 1988; Billig, 1991; Billig & Sabucedo, 1994) have explored the ideological nature of common-sense and suggest that rather than comprising of a coherent, static and consistent network of beliefs, common-sense represents a mishmash of ideas, some originating in scientific thinking, political ideologies, or philosophical traditions, and others whose origins are long forgotten, but all of which are the basis for arguing.

Bavel attends to both ideological and historical aspects of social representations in discussing the impact of neoliberal ideology. However, the wider literature on lay people’s theories of the economy neglects and in places outright rejects (Caplan, 2006) this ideological and historical level of analysis, reducing ideology to the left-right or liberal-conservative categories or associating it with support for political parties.

³¹ Besides distinguishing his “restricted” conception of common-sense from something all people share, an “unrestricted” common-sense, Billig also points out that common-sense should not to be mistaken for “good sense” (1987, p. 201).

A rhetorical perspective can be seen to diverge from social representations theory in its focus on how people are rhetorically *using* social representations, or *representing*. Gibson draws on Billig (2008, p. 366), who has problematised the use of the nominalised form of “social representations” over the active process of “social representing”, and suggests that the preference for this nominalised form risks obscuring who is doing the representing and reifying social representations. Integral to this difference is scepticism among discursive-rhetorical psychologists about the actuality of cognitive representations and language as an unproblematic way to access these representations (Billig, 2009). Discursive-rhetorical psychologists (for discussion, see: Potter & Wetherell, 1987; Billig, 1997) draw on the thought of Ludwig Wittgenstein (1968) and J. L. Austin (1975) in orienting to studying the use of language. In the case of the rhetorical perspective this means a shift from studying assumed cognitive structures underpinning thought to studying people thinking as they use language.³²

Gibson (2015) illustrates the importance of this shift in his analysis of the use of historical analogies in a specific television broadcast, pointing out that people were not simply deploying historical narratives, which might be labelled social representations, to understand or make sense of intervention in Iraq, but they were representing the current situation in terms of specific historical analogies “as part of rhetorical projects aimed at making the case for or against military action”.

This shift away from an understanding of social representations (and lay theories more generally) as primarily functional for “sense-making” is not a trivial point when it comes to thinking about the nature of what we are researching (Gibson, 2015, p. 17). The importance of this point can be further illustrated from past research. The theories or representations that previous researchers have attempted to extract from lay people, including metaphorical representations (Leiser & Kril, 2017), causal accounts (Leiser & Aroch, 2009; Williamson & Wearing, 1996) or “modes of economic thinking” (van Bavel & Gaskell, 2004) and so on are less meaningful when stripped of this active quality. For instance, metaphorical representations of the economy as a household or body or machine

³² It should be noted, that scholars of politics might draw parallels between the thought of Quentin Skinner (2002), who also draws on Wittgenstein and Speech Act theory and the rhetorical tradition (Palonen, 2003). Like Billig, Skinner also draws attention to what writers were *doing* in specific historical texts in relation to the specific argumentative context it replies to. The parallels between the thought of Billig and Skinner are worth examining further.

are not merely attempts to make the “something unfamiliar [...] familiar” (Moscovici, 1984, p. 24) or to educate people about how the economy works. These metaphorical ways of representing the economy are used in attempts to persuade people about particular courses of action and these ways of representing are understood in an argumentative context in which there exists the possibility of disagreement and rival accounts. This active quality, this representing, therefore again indicates why context matters, because this action of representing is oriented to an “argumentative context” (Billig, 1991, p. 44).

The preceding discussion differentiated a perspective informed by rhetorical psychology from social representations theory. This can be applied now to specify how this research will conceive of and approach the study of lay people’s theories of the economy.

3.4.2 Implications for research: studying the rhetoric of the economy “in the wild”

Attending to the rhetorical dimensions of thinking stimulates a rethink of lay people’s theories of the economy. The reconceptualisation I am proposing draws on this distinction between *representations* and *representing* and depicts lay people’s theories of the economy as action oriented to a context of ongoing public debate. Specifically, this means: orienting to how people use *economy* in debate (or the rhetoric of the economy “in the wild”); studying the rhetoric of the economy as context and exemplar for thinking; and, appreciating that the use of the economy has an ideological and historical background.

3.4.2.1 Studying the use of *economy* in debate

Rather than a passive view of lay theories existing as cognitive structure, which exist largely independent of their use, the active quality of lay people’s thinking is highlighted. Rather than assuming that lay people’s theories are primarily functional for understanding or making sense, attending to this active quality foregrounds what people are doing, as in “arguing and thinking”³³ in relation to the questions and dilemmas of politics. Appreciating the argumentative purpose of lay

³³ This borrows the title of Billig (1987).

people's theories of the economy requires attention to disagreement and contestation. This theoretical shift implies a methodological shift from uncovering structures of belief to studying lay people's rhetorical use of the economy in debate, which implies a requirement to study lay people's thinking in settings that allow debate.

The shift to study lay people's *use* of *economy* highlights the instrumentality of the term itself, what it is being used for and what people are doing with it, rather than what it inherently means. This also indicates why this research concentrates on the use of the word *economy*. As will be elaborated in Section 3.5, *economy* is not solely the possession of economists in their academic dialogues, it has its origin and history of use in public discourse and is an "economic" term that lay people are likely to be exposed to through public discourse.

This reorientation to study how people are using economy, or the rhetoric of the economy "in the wild", requires that we study settings where disagreement and debate are a feature. As I will discuss further in Chapter 4, I will study regularities of the use of *economy* to understand common features of the rhetoric of the economy, including common-sense ideas related to the economy, and regularities related to common arguments and disagreements. The intention is to use these features to rethink lay people's theories of the economy.

3.4.2.2 Studying the rhetoric of the economy as context and exemplar

As mentioned in Chapter 1 (see Section 1.4), I described how the rhetorical psychology proposed by Billig (1987, 1991) suggests there is an opportunity to observe people thinking when they are engaged in argumentative discourse (for example, see: Billig, 2006, p. 19). These are ideas he explored and applied in his study of the common-sense thinking related to the British royal family (Billig, 1992/1998), but this is also a common thread in his writing on rhetorical psychology (in particular, see: Billig, 1991). There are two further intentions for studying public debate that are closely related to ideas posed by rhetorical psychology.

Firstly, a key idea of the rhetorical approach is to take the argumentative context seriously when interpreting an utterance and so people's thinking should be studied in relation to public

controversies and dilemmas, and arguments they are participating in when they argue and think. In the case of lay people's theories of the economy, I am proposing that studying political debate that uses *economy* is a way to understand this *argumentative context*, the controversies, dilemmas, and the argumentative positions lay people justify and critique in relation to the economy. If lay people's "economics" should properly be thought of as political, relating to political questions and existing in a dialogical context of political debate, then public deliberation related to the economy provides insight into lay thinking.

A second idea, perhaps taking comments in *Arguing and Thinking* (Billig, 1987) much more seriously than Billig himself would, is to draw on the idea that public debate exemplifies thinking. The following is a key passage in explaining this aspect of the "rhetorical approach":

If deliberation is a form of argument, then our thought processes, far from being inherently mysterious events, are modelled upon public debate. In consequence, the rhetorical handbooks, which provide guides to debate, can also be considered as guides to thought.

(1987, p. 5)

In this passage Billig suggests that public debate provides the model for people's thinking. He also suggests that the classic texts on rhetoric, because they provide instruction into the arts of argumentation, provide insights into thought. As Billig (1987, pp. 198-199) describes, it was common in these rhetorical handbooks to include discussion of common-places, which he relates to common-sense, common themes of argument that can be used in appeals to an audience. For example, Aristotle (2007, pp. 53-54,58) in his treatise on rhetoric discusses common-places related to public spending and wealth. As discussed in Section 3.5 there is a recent history to the contemporary use of *economy* and this is not a concept that the classic rhetorical handbooks addressed explicitly (Finley, 1973). Furthermore, given the arguments of Moscovici (1984) and Billig (1991) that ideas from scientific and ideological sources reshape the content of common-sense, to understand common-sense related to the contemporary thinking related to the economy would require a modern handbook or a contemporary investigation.

So, in essence, what I am proposing to do is to study the rhetorical uses of the economy when political leaders argue about politics as *an exemplar of thinking*. Public political debates, or if you like, professional debate, related to the economy arguably has relevance to lay people thinking about the economy. It should be pointed out here though, that suggesting that political debate related to the economy is an exemplar is not to replace an account of lay people's thinking as an impoverished version of economics with a view that it is an impoverished version of politics. That my understanding of politics as dissensual, even in its most narrow form should negate this view. What I am suggesting is that public political debate, exhibits features and content that is likely to be relevant to understanding lay people's thinking about the economy and that this might be a literal model as lay people are socialised into the political debates of their polity.

3.4.2.3 Appreciating the ideological and historical background to the use of *economy*

Applying rhetorical psychology also involves attending to the ideological and historical dimensions of lay people's thinking in relation to the economy. The rhetoric of politicians and lay people is assumed to express and reflect ideology, both in the sense of "intellectual ideology" (Billig et al., 1988, pp. 28-29), formalised systems of thought, and in the sense of "lived ideology" (p. 27), the common-sense and taken-for-granted ideas that remain unchallenged in discourse and that function to naturalise or justify power relations in a society. Some important ground work for this has already been undertaken in Chapter 2 (see Section 2.4), in indicating an ideological context in which a dominant set of ideas about the role of economic expertise in relation to a modern state denies the political nature of economics *applied*. Even if this is taken for granted, there are still debates related to the economy. This enquiry examines the nature of these debates.

Something that needs to be specifically addressed is that *economy* has a history of use. This emphasises the historical and contingent nature of lay people's theories of the economy. Therefore, scholarship on changing use of *economy*, and especially scholarship related to the New Zealand context, is highly relevant and this is explored in the following section. As Hope (1991) points out, in discussing representations of the economy in the New Zealand context, the concept itself takes on new usages and meanings as the ideologies dominating the rationale for government action in New

Zealand have changed. The scholarship on the historic use of *economy* will be reviewed in the remainder of this chapter.

3.5 Background on the use of *economy*

The choice of focusing on studying the use of the word *economy* is crucial in this reoriented “in the wild” enquiry. The choice of *economy* is intentional as it is unarguably “economic” in common usage, but is a familiar term with a history of public use. It is also a signifier academics researching lay people’s economic thinking have frequently used in their survey items and prompts (for example, see: Williamson & Wearing, 1996; Blendon et al., 1997; Bastounis et al., 2004). Discussing the use of the term *economy* in economics, Schabas (2009, p. 5) states that the term is absent from dictionaries of economics but it is closely associated with macroeconomic indicators:

For scientific economics, the economy remains a theoretical construct. It cannot be perceived directly, though it can be constructed out of the leading indicators, such as the interest rate or GDP, that are used to judge its overall performance and efficacy. What precisely guides theorists so as to stitch these indicators together and thus finesse the temporal differences in the estimations is left underspecified.

(p. 16)

Schabas points out that in contrast to this scientific conception, that use of the word *economy* is a feature of “everyday speech” (p. 16), suggesting that it is a key marker differentiating economists and lay people’s thinking, and concludes by claiming: “No single term in economic discourse better captures the serious divide between the folk and scientific approaches” (p. 17). The economy is both economists’ macroeconomy and something else. Schabas concentrates on economists’ *economy* but only offers anecdotes the use of *economy* “in the wild”. This indicates the relevance of studying lay usage of *economy* to illuminate this “folk” kind of economic thinking.

In the remainder of this section I draw on relevant academic research on the public use of *economy* over time to provide an understanding of the historical, political and ideological dimensions of the term, but, in particular, to draw attention to the emergence of a modern conception in the second half of the twentieth century represented by use of the noun phrase *the economy* (Emmison, 1983; Hope, 1991; Mitchell, 2005). Although *economy* is a term with significance in contemporary

public discourse (Gibson-Graham, 2005, p. 94), this has not always been the case. Research on the emergence of the modern usage of *economy* further reinforces the contingency of economic thinking, both expert and “in the wild”.

There is a long lineage of use of *economy* related to prudent management. The ancient Greek origins of the words *economy* and *economics*, *oikonomia*, was related to management of the household (Finley, 1973, p. 17). There are examples from antiquity of this also applied to “any sort of organization or management”, including the management of the city in a general sense and not specifically related to finance or material resources (p. 20). Finley traces this usage to the French *l'économie politique*, although this was still used in relation to the management of the polity more generally (p. 21). *Political economy* in this sense referred to the “economy, or government, of the polity, not to the politics of the economy” (Mitchell, 2008, p. 449). From the eighteenth century *political economy* became more closely associated with the emerging discipline of economics, as “the science of the wealth of nations” (Finley, 1973, p. 21).

In the early 20th century, *economy* was being used to signify a policy or programme of prudent management of state finances and resources (Emmison, 1983, p. 146). Figure 3.1 displays a cartoon from a New Zealand newspaper in 1921, which depicts two female forms labelled “Expenditure” and “Economy” that together represent “The Prime Minister’s Problem”. The problem is the dilemma between “Expenditure”, embodying the pleasures of spending, and “Economy”, embodying the pressure for prudence or frugality, represented by a figure with broom in hand.

Research indicates that a change occurred in use of *economy* in the 1930s (Emmison, 1983; Hope, 1991; Mitchell, 2005, 2014). Timothy Mitchell (2014, p. 481) states that: “[a]round 1948, it became common in American political debate to talk about the economy” and that at this point the construction *the economy* was used self-evidently, without the need to elaborate. Emmison (1983) located a similar timing from studying English, American and Australian newspapers and Hope (1991) conducted similar research in the New Zealand context. It emerged primarily in qualified forms (e.g. “the national economy”, “the British national economy, “the general economy”) and as a

passive object, “something which has things done to it or is shaped by other forces” (Emmison, 1983, p. 149). Emmison notes that the use of *the economy* without qualifiers became much more common from 1945. Hope (1991, p. 119), who drew on Emmison’s work in a study of representations in New Zealand media, indicates that it was around 1960 that the “unqualified technocratic locution”, *the economy*, became a common feature in media discourse. Hope argues that there is ideological significance of *the economy* becoming common-place in public discourse because this unqualified form “silence[d]” the contingency of arrangements that constitute a “capitalist economy” (p. 47).



THE PRIME MINISTER'S PROBLEM.

Figure 3.1 “The Prime Minister’s Problem”, a cartoon featuring *economy* from 1921³⁴

A crucial trigger for the timing for the change in use of *economy* from the mid-1930s was the influence of John Maynard Keynes and the emergence of Keynesianism as an orientation to governing. Both Emmison (1983) and Mitchell (2011) argue that Keynes and Keynesianism was influential in specifying and propagating the concept. Emmison (1983, p. 148) depicts this as in part an argument against the economising notion, which is: “that the economic wellbeing of a nation could be vastly improved by the then heretical notion of acting in ways that had up to that time been considered formally uneconomical”. The influence of Keynesianism on political leaders indicated a key shift in specifying *the economy* as the object of state “management”, supplanting a previous concern with managing “population and its prosperity” (Mitchell, 2006, p. 182).

³⁴ (New Zealand Herald, 1921).

In addition to the influence of Keynesianism, Mitchell (2014, pp. 483,497) also stresses the importance of the techniques of measurement (e.g. national income accounting) and practices of measuring (e.g. national governments doing national income accounting) that coincided to allow *the economy* to be represented both as a whole and as interacting parts and as stable in a state of perpetual growth. These new forms and practices of calculating provided economists with new ways to theorise about and model the whole and the interacting parts, which further objectify the economy (Mitchell, 2006, p. 183). It was the institutions of the state that were primarily doing the calculating that are considered key ways to represent *the economy*, and as Mitchell (2006, p. 184) has also pointed out, economics “became dependent on the state for almost all its data”.

There are important implications that can be drawn from these historical developments, in terms of interactions between economic expertise, the state and *the economy* as a new idea. Firstly, rather than being a pre-existing concept that was operationalised by the indicator/s, *the economy* came to be represented at its inception through the indicators available through historical and political circumstances and became embodied by these indicators. This account inverts and subverts the orthodox positivist interpretation of operationalisation. Secondly, this historical view indicates the reflexive interplay between what the state historically came to measure and what economists theorised about and saw as manipulatable. Thirdly, these indicators were objects with a politics, as has been pointed out in the New Zealand context with analysis of how the Consumer Price Index is measured (Higgs, 2015). Finally, economists’ ideas fed back into policy and institutions that further entrenched the concept of *the economy*.

In discussing the changing use of *economy* and emergence of this contemporary pattern of usage it is necessary to distinguish this from the way *economy* is used in the arguments of Karl Polanyi (1944/2001, 1957a, 1957b) and Michel Foucault (1991). Both scholars locate the emergence of *the economy* prior to the twentieth century. While these arguments are significant and influential, the concern is here on the use of the word itself in public discourse and Mitchell (2008, p. 449) points out that “no nineteenth-century writer conceived of the economy as an object or sphere” or used “the economy” to name such an object or sphere. Polanyi’s use of *economy* in *The Great Transformation*

in 1944 should itself, according to Mitchell, be understood as an example from the time the contemporary usage was emerging (p. 452).

A key concern of scholars in describing the conceptual shift that was underway during the mid-twentieth century is the ideological functioning of the noun phrase *the economy* to represent an abstract entity that is separate from social, environmental, and political spheres (Gibson-Graham, 2005, p. 94). During the period in which Keynes' ideas were becoming influential *the economy* was represented as a passive object that was subject to management by government. Emmison (1983) suggests that during the post-war period of Keynesian consensus, *the economy* increasingly came to be represented as active and autonomous, drawing on "mechanical or biological metaphors" and depicted as an agent in its own right (Emmison, 1983, pp. 149-150). As abstract, independent agent, *the economy* served an important rhetorical function:

For the economy is cast as something more compelling and powerful than given political and sectional demands. [...] The economy, in short, appears to be on no one's side. In this way unpopular political decisions and policies can be taken and justified whilst avoiding the charge of class- or self-interest. The nation's economy is apparently more important than its citizens.

(Emmison, 1983, pp. 153-154)

Figure 3.2 shows a cartoon from 1960 representing the "New Zealand Economy" as a car, with politicians depicted as both driver and mechanic. The car is both an independent machine that requires specific action for maintenance and repair, as well as the object of action by political leaders who are responsible for its care and upkeep. Although in this case not possessing agency itself, the implication is that once the required repair is completed the car will continue the journey forward with the politician steering.

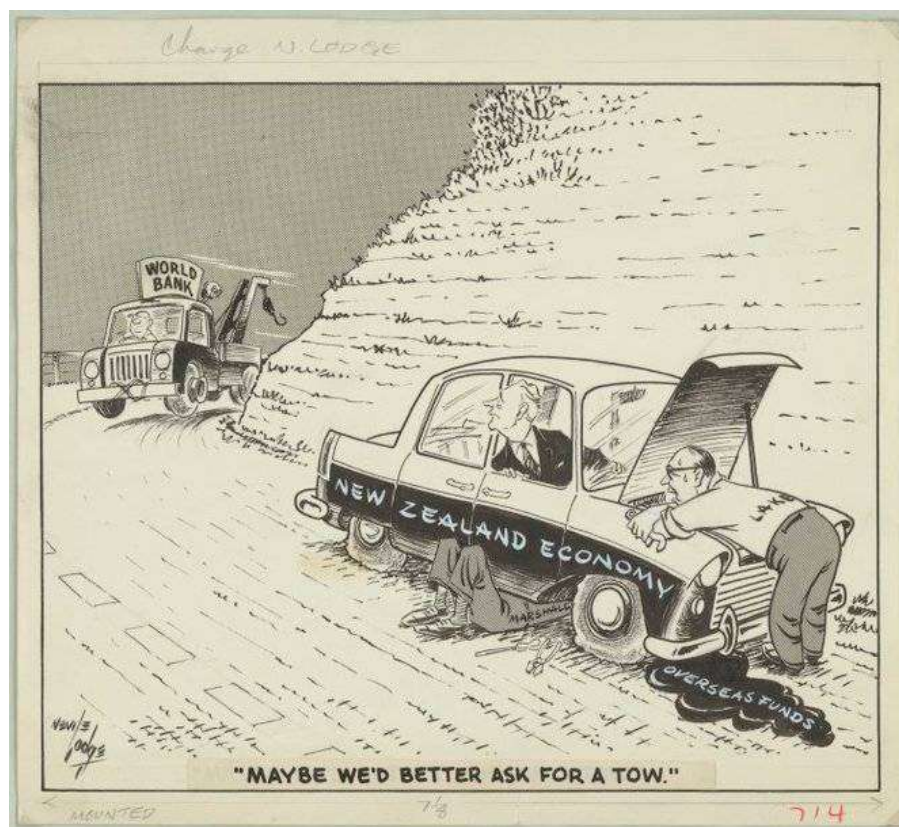


Figure 3.2 “Maybe we’d better ask for a tow”, a cartoon featuring *economy* from the 1960s³⁵

Emmison’s work in the early 1980s indicates both the influence of economic ideas on how *economy* was represented over time and the purposes to which *economy* was being put in public discourse. Research conducted in the New Zealand context elaborates this further in relation to the radical neoliberal reforms that began in 1984. Hope (1991, pp. 381-382) describes how at key moments in the first parliamentary term of the fourth Labour Government there was conflict related to *the economy*, with the idea of a “managed” *economy* challenged by neoliberal arguments that, in an ideal state of affairs (i.e. freed of government management and intervention), *the economy* was naturally self-regulating. Previous political interests and approaches to economic management were cast as problematic and implicated in the problems of the economy. Economic experts from the bureaucracy, universities and business groups were seen to be offering non-political solutions to New Zealand’s economic problems. Along with these economic experts, advocates from political parties, the bureaucracy, and corporate interest groups argued that a process of rapid legislative change was

³⁵ (Lodge, c.1960)

required to free *the economy* of regulation so it could better self-regulate. Hope suggests that this point in time marked a change as media began to represent *the economy* as the “freemarket” *economy* (p. 382). Figure 3.3 displays a cartoon from 1985 which represents the “New Zealand Economy” independent from the Minister of Finance and key reformer, Roger Douglas, who is praying to Chicago-school economist Milton Friedman for a “market force”. Hope’s analysis finishes in 1987, but this was only the start of an extended period of radical reform and sedimentation of the neoliberal approach to economic arrangements and management (Roper, 2015; Goldfinch, 2000).



Figure 3.3 "Oh...St Milton... send me a market force... real quick!", a cartoon featuring *economy* from 1985³⁶

The distinction that Polanyi (1944/2001, 1957a, 1957b) proposes between an *embedded* and *disembedded* economy is relevant to the way *economy* was represented through the period of the reforms of the 1980s and beyond. Polanyi (1944/2001, p. 60) introduces the idea in *The Great Transformation*, stating:

[...] the control of the economic system by the market is of overwhelming consequence to the whole organization of society: it means no less than the running of society as an adjunct to the market. Instead of economy being embedded in social relations, social relations are embedded in the economic system.

³⁶ (Lynch, 1985)

Polanyi introduces the idea to critique the utopian ideal of an economy organised based on the “self-regulated market”, placing the unnaturalness of a separate market sphere in historical and anthropological perspective. The concept of embeddedness was developed in his later work (Polanyi, 1957a, 1957b) where he historicises and elaborates a conception of a *disembedded* economy, stating:

The disembedded economy of the nineteenth century stood apart from the rest of society, more especially from the political and governmental system. In a market economy the production and distribution of material goods in principle is carried on through a self-regulating system of price-making markets. It is governed by laws of its own, the so-called laws of supply and demand, and motivated by fear of hunger and hope of gain.

(1957a, p. 68)

In contrast, the pre-modern economy was *embedded*, but this *embedded* form was for Polanyi also the proper way to conceive of the economic sphere: “the human economy [...] is embedded and enmeshed in institutions, economic and noneconomic” (1957b, p. 250).³⁷ The *embedded/disembedded* distinction is useful because it illuminates the way neoliberals represented and reimagined *the economy* in the 1980s.³⁸ Radical legislative and institutional change was advocated and progressed by neoliberal proponents to expose labour, businesses and the public sectors to market incentives and, in so doing, to reconfigure *the economy* as *disembedded* entity. In the neoliberal imagination, the market *economy*, freed from the state, was self-regulating.

This discussion provided background to the use of *economy* as historical, political and ideological and grounds this in the context of New Zealand political change. It is clear that the contemporary idea of *the economy* originated as an “object of politics” and an object *in relation* to politics (Mitchell, 2011, p. 9). The research discussed, other than Hope (1991), has tended to focus on the broad shift to an abstracted and separate economy and is less concerned with the specific debates that occur in public discourse. This thesis offers the potential to understand the use of *economy* in New Zealand in the period after that studied by Hope (1991). This discussion has also justified the

³⁷ Polanyi’s primary concern in the use of the distinction in these later works is the appropriate way to conceive of and analyse pre-modern economies.

³⁸ The point by Mitchell (2008) should again be emphasised: there were no rhetorical appeals to a *disembedded economy* that precede the idea of an abstract, independent, self-contained entity that originated in the mid-twentieth century.

choice of studying the word *economy* in that it foregrounds a gap between an idealised economic kind of knowledge and evidence of lay, political and “wild” usage. The idea of the economist-lay distinction appears even more problematic when we see the entrenched political nature of this term in both its origins and ongoing practice.

3.6 Summary

In this chapter I interrogated a second assumption that is common in the literature, which is to conceive of lay people’s theories of the economy as an individual-level cognitive structure. I illustrated how context is stripped from participants’ responses using both survey and interview techniques. I drew attention to the few studies that draw attention to a context of political debates and political rhetoric in relation to the economy. This chapter proposed a theoretical reorientation that emphasises a contextual understanding of lay people’s thinking about the economy, situating this in relation to the ongoing disagreements of political debate. This is important in setting up the discussion in the chapter to follow, which explores more concretely how I intend to study the rhetoric of the economy “in the wild”.

Chapter 4 Studying the rhetoric of the economy “in the wild”: the relevance of a corpus-assisted approach

4.1 Introduction

The “in the wild” perspective that I began developing in the last chapter to challenge to the view of lay theories *in the head* or *from the Academy* recognises and attends to the public political dimension of the economy. This reorientation, which is both theoretical and methodological in nature, indicates what should (and should not) be the object of study. The last chapter argued that studying how people use language as they disagree and debate has deep significance for the study of lay people’s theories of the economy because it offers the opportunity to observe both the activity of thinking and the context that people are orienting when they think.

In this chapter I set out how I am approaching the study of lay people’s theories of the economy in a way that addresses the assumptions that I suggest have been neglected in previous research. Deviating from past research that has favoured surveys and interviews to investigate the assumed interiority of lay theories and consistent with the argument of the preceding chapter, I propose to study the public use of the word *economy*. To do this I am utilising methods developed by corpus linguists to study language use, and specifically the “corpus-assisted” approach to studying discourse articulated by Alan Partington (2003, 2004, 2013). Corpus linguists have argued for the potential relevance of corpus methods for studying how people explain social phenomena (McEnery & Wilson, 2001, p. 129). This chapter plays a crucial role, therefore, in explaining the relevance of corpus methods for an enquiry that aims to contribute to our understanding of lay people’s thinking. This chapter concludes by introducing the two studies that follow.

4.2 Studying rhetoric “in the wild” as an alternative to studying self-reports

Reviewing how to approach the study of lay theories in general, Furnham (1988, p. 16) discusses a range of methods, including surveys, interviews, experiments, analysing behaviour, and ethnographic methods. Past research by economists and psychologists on lay people’s economic thinking have favoured “self-report” methods (Furnham, 1988, p. 16), which includes survey methods and interviews. While there has been some research based on interviews (Williamson & Wearing, 1996; van Bavel & Gaskell, 2004), the majority of researchers (including Furnham) have relied on the analysis of survey data (for example, see: Haferkamp et al., 2009; Bastounis et al., 2004; Jacob et al., 2011; Leiser & Aroch, 2009; Furnham, 1988; Dixon et al., 2014; Blendon et al., 1997; Caplan, 2006; Wobker et al., 2012; Walstad & Rebeck, 2002).

In the last chapter I began problematising self-report methods because they embed problematic assumptions about the nature of lay people’s thinking about the economy. Although qualitative interviews might instinctively offer the researcher a way to overcome some of their presumptions about lay people’s thinking, drawing on my experience from a series of focus groups that I ran as an early pilot study, I observed problems of eliciting talk about economics. A paper from Potter and Hepburn (2005) was useful in formalising the problems with qualitative interviews in this regard and the potential of studying “naturalistic records” to overcome these issues. I anticipate and respond to potential criticisms of an approach that utilises naturalistic records of public rhetoric “in the wild” as data for psychological research.

4.2.1 Identifying problems with applying self-report methods for studying lay people’s theories of the economy

When discussing survey methods there were instances when psychologists researching lay people’s theories have acknowledged the potential problem of “imposing the researchers’ own cognitive constructs on the respondents” (Furnham, 1988, p. 17) or embedding researchers’ assumptions and concepts (Bastounis et al., 2004, p. 274). This is especially problematic if people are not familiar with terms from economics. Reviewing studies using surveys, there are clearly some contradictions

between, on the one hand, research that demonstrate lay people's lack of understanding about entities or phenomena from economics (see Chapter 2), and on the other hand, studies interpreting the responses that lay people give when asked to evaluate or causally relate these same entities and phenomena (see Chapter 3). If people are not familiar with economists' terminology for their entities or phenomena (e.g. inflation), then it might be reasonable to query what people actually mean when they are responding to a researcher's question that uses this terminology. I propose that this is a significant contradiction.

In an attempt to address this concern, early in this thesis research (in 2014), I conducted a pilot study of focus groups based on groups of people who already knew each other.³⁹ In part, the pilot study was inspired by the methodological point by both Bastounis et al. (2004) and Williamson and Wearing (1996) who suggest the value of techniques "that allow respondents to define their own lay theory" (Bastounis et al., 2004, p. 274). This was also inspired by my engagement with rhetorical psychology and particularly research by Billig (1992/1998).⁴⁰ The point of the focus groups was to "get out of the way of people" and to let them talk rather than structuring the interaction and directly eliciting economic thinking. The premise of the pilot study was to provide a setting for people to discuss, with as little input from the researcher as possible, an upcoming general election and to see whether and how economics entered into the discussion. The group was asked explicitly about economic ideas near the end of the discussion time.

What emerged from this pilot study, was just how difficult it was to prompt people to talk about economic ideas and concepts. Most of the discussion was dominated by controversies related to a series of allegations against the incumbent National Party and their leader, John Key. People tended to discuss these controversial aspects of the election and not, for instance, the state of the economy or the economic policy platforms that parties were running on. When prompted explicitly about the economy and economic policies of the political parties, there was generally a long pause and quiet.

³⁹ Appropriate ethical clearances were obtained for this research from the University of Canterbury Human Ethics Committee.

⁴⁰ Billig (1992/1998) studied conversations between family members to examine common-sense related to the British royal family.

While discussion had been enthusiastic and “natural” about the other topics, this was not the case when I tried to get people to talk “economy” explicitly. My initial reaction was that this was related to the contrivance of this talk in relation to the free-flowing conversation about topical issues. I was also conscious of the power dynamics of the interaction and the potential that my position as a researcher and as a male Pakeha (i.e. New Zealander of European descent), which the literature discussed in Chapter 2 has indicated are markers of privilege with respect to economic thinking, may have influenced the difficulty of prompting free-flowing discussion. I was reluctant to draw on examples of people talking where they were obviously resistant to engage in the kind of talk that I was trying to prompt. The pilot study reinforced a practical problem of this kind of research: it was difficult to create a situation that would facilitate people spontaneously talking “economy”.⁴¹

Potter and Hepburn (2005, pp. 297-299) have argued, interviews and focus groups can also be criticised for foregrounding conceptual and causal talk and uncritically interpreting interviewees’ use of psychological language (for example, “believe”, “think”, “feel”) as indicating actual underlying cognitive states. They label these tendencies the “reproduction of cognitivism”. They also warn social scientists that when they construct interviews to focus on the issues they are studying, when they use social science terminology, or request social scientific analysis, they risk eliciting “those same [social scientific] agendas and categories back in a refined or filtered or inverted form” (p. 293).

The participants in the Williamson and Wearing (1996) study were presented with abstractions (for example, “people in Australia”), were being asked to respond with causal attributions, and were then prompted with economic terminology. The question and the cue cards and the way in which Williamson and Wearing go on to analyse the “free discourse” to build a cognitive model reproduce both their cognitive perspective and the same economic entities and phenomena that they are prompting people to talk about. The claim is then made that what they have elicited are

⁴¹ Prior to the pilot study I had researched and considered other ways to produce naturalistic conversation or observe actual conversation relevant to lay economic thinking. None of these appeared to offer an alternative that would address the limitations of the pilot study and some (e.g. participant observation) presented many more practical challenges. My analysis of the Wellington Corpus of Spoken New Zealand English (WSC) discussed in Section 4.5 indicated that even if I could create a setting that produced interactions approximating an ideal of private dialogue, talking *economy* was something I would still need to prompt as it was unlikely to emerge spontaneously in dialogue.

cognitive models. Given that the models are constructed from the uninterrupted speech of people, given the variability that would certainly be expected if people were asked to repeat the exercise (Antaki, 1988a, p. 72), given interviewees apparent critical stances, the question might be asked: are these cognitive models or are they better thought of as *rhetorical models*? I argue that these rhetorical models, in their complexity and variability and orientation to a political moment, record the kind of arguing thinker Billig has proposed, but because they focus on these as cognitive structures that people have, they potentially ignore much of what people are arguing with or thinking about.

Reflecting on this, the problems for self-report methods are potentially more serious than has been discussed previously in this domain. Both the structured responses of surveys and the open responses of interviews embed the researcher's assumptions. Referring back to the discussion of Flyvbjerg (2001) in Chapter 2, the methods used in past research on lay people's theories has potentially privileged and reproduced the orientation of economics as *episteme*, while neglecting the potential that people's thinking is much more closely tied to their political and historical context (*phronesis*). The rhetorical critique is therefore, not just the problem of backgrounding argumentative context, but further that in presenting people with an economics to respond to, these methods embed assumptions about the cognitive reality of what they are assessing.

I have argued that there are limits to what can be concluded from previous studies of lay people's theories of the economy that use self-report methods. Research using these methods appear to have decontextualised participants' responses from the wider context of political debate and argument. If there are political dimensions to lay people's theories of the economy then this probably matters. Furthermore, while self-report methods indicate people can think about economic concepts and ideas, these methods do not necessarily reveal the cognitive structures of people that researchers have assumed are there and may actually reproduce their assumptions about what constitutes the cognitive underpinning of lay people's theories and an orthodox disciplinary view of economics. This is not to say that surveys and interviews are useless for studying lay people's theories, rather that there are multiple challenges to the interpretability of results.

4.2.2 Studying “naturalistic records” as an alternative to self-report methods

My thinking about the way to appropriately study lay people’s theories of the economy crystallised in reading Potter and Hepburn (2005) and reflecting on the pilot study, as well as my early investigations using corpus methods and more reflections on assumptions underpinning the previous research. As I will detail in the remaining sections of this chapter, I reoriented the way I was approaching this research to study what Potter and Hepburn (2005, p. 301) have referred to as “naturalistic records” and what corpus linguists refer to as corpora. In the remainder of this chapter I propose the study of examples of language use to study lay people’s theories of the economy as well as the argumentative context that I argue is useful for interpreting these theories. Studying “naturalistic records” has been argued to overcome some of the limitations of qualitative interviews. As I have already argued, these limitations have a broad relevance to the self-report methods that have been traditionally favoured to study lay people’s theories. By naturalistic records Potter and Hepburn mean audio, video and textual records that have been created without the participation of the researcher (p. 301).⁴² Examples they provide include “recordings of conversations in everyday or work settings”, “television programmes”, and “personal diaries” (p. 301). They argue this allows a shift in focus from the researcher’s terms and assumptions and the usually unreported or underreported role the researcher plays in provoking these, to an enquiry that attends to what people are doing when they speak or write. In terms of the study of lay people’s theories, this means a change from “flooding” people (p. 291) with terms and ideas from economics or even asking people to “define their own theory” (Bastounis et al., 2004, p. 274). Instead, by studying actual examples of language use, this allows a mode of enquiry that can focus on the rhetorical uses of the economy by lay people.

As discussed in Chapter 3, although rhetoric about the economy has been the subject of claims in the literature, this is within a conceptualisation of lay people’s thinking that posits public discourse as encompassing the information environment for people’s cognitive representations (for

⁴² There are debates about what constitutes naturalistic, natural, or contrived data. See Goodman and Speer (2016) for recent discussion of this.

example, see: Furnham, 1988; Leiser & Kril, 2017).⁴³ When discussing the content of public discourse researchers have tended to focus on noticeable features of language, such as metaphors (again, see: Furnham, 1988; Leiser & Kril, 2017) or evaluative language (for example, see: Leiser & Aroch, 2009). Observations about debate and discourse features are, however, quite separate from the way past research has engaged with studying lay people's thinking though.

Furnham (1988, p. 221) does discuss something close to the study of naturalistic records when discussing the "self-presentation of lay theories",⁴⁴ although he does not cite examples that apply this to lay people's thinking on the economy or economics. For Furnham, the usefulness of these naturalistic records to study lay people's theories is limited though. Discussing a study of "letters to the Editor", Furnham lists three limitations, including that the authors of letters were not likely to be representative, that published letters were not likely to represent all letters submitted, and that letters may not have represented an individual's opinion (for example, it might have represented the position of an unknown interest group) (p. 222). These hesitations serve as a useful example of the self-critical stance required when approaching the study of naturalistic records. However, this also illustrates the historic tendency for social psychologists who favour a cognitivist orientation to privilege the level of the individual, reflecting an asocial social psychology (Augoustinos et al., 2014, pp. 6-7; Hepburn, 2003). Furnham approaches the analysis of naturalistic records as a possible route to attitudes, which he understands as individual-level, cognitive phenomena. The problem for Furnham appears to be that the essence of the "self-report" of a "letter to the Editor", or other kind of "self-presentations", is that it is social and situated and therefore not generalisable as individual-level phenomena beyond the specific context being studied.

The rhetorical critique of attitudes (Billig, 1987, Chapter 7), discussed in Chapter 3 (see Section 3.3.1), exposes the limitations of this position. As I have argued, the rhetorical aspects that are

⁴³ There is one study that explicitly studied public rhetoric in relation to their wider aim of research into social representations of the economy. In his PhD research René van Bavel (2000) applied Toulmin's (1958) model of argumentation to analyse newspaper editorials, primarily using these to provide further evidence for social representations found in the interview-based portion of his research.

⁴⁴ Interestingly, even though Furnham (1988, p. 223) acknowledges that these studies appear to demonstrate the variability and context-dependency of lay people's use of theories, he leaves the study of self-presented lay theories out of his list of methods for studying lay people's theories (p. 16).

deemed problematic by Furnham in these records of lay people using theories are also relevant for self-report methods, like surveys and interviews. When providing data through a survey or interview, we cannot simply assume that participants are speaking without referring to the social and political context, or that they are not relating their positions to established argumentative positions.

I have introduced the study of naturalistic records as a promising alternative to attitude surveys and interviews or focus groups. In rethinking lay people's theories of the economy I have argued for a shift in attention from enquiry guided by disciplinary economics and from the individual and their cognitions to how people are orienting to their argumentative context "in the wild", and in particular public controversies to which lay people are applying ideas about the economy. I have suggested that to understand this wider argumentative context requires studying public political rhetoric related to the economy, which again draws in the relevance of studying language use documented in naturalistic records. In the sections to follow I develop this argument further. Next, I present corpus linguistics as a way in which linguists approach studying language records of language use.

4.3 The relevance of a corpus-assisted approach to studying the rhetoric of the economy

I have identified some limitations of self-report methods favoured in past research on lay people's theories of the economy and have argued that an alternative, which potentially overcomes these limitations, is to study how people use the economy in the context of public argument and debate. In this section I introduce corpus linguistics as a method that can be employed to detect and study linguistic regularities in real language data. The use of corpus methods to study discourse has a similar rationale to other digital methods that use computational processes to "detect socio-epistemological formations and to render these patterns visible"⁴⁵ for further interpretation and critical analysis by academics and other interested audiences (Marres, 2015, p. 661; 2017; Rogers, 2013). I will specifically discuss the relevance of a "corpus-assisted" approach to study discourse (Partington, 2003, 2004, 2013) for the theoretical perspective proposed. The following discussion introduces why

⁴⁵ This borrows a phrase used to describe one approach applied to analyse controversies using digital methods.

and how linguists use corpora to study examples of language use. This sets up subsequent discussion of synergy between corpus linguistics and rhetorical psychology.

4.3.1 Introducing corpus linguistics, key concepts, and using corpora to study discourse

In the introductory chapter (see Section 1.4) I quoted McEnery and Wilson (2001, p. 1), who define corpus linguistics as “the study of language based on examples of ‘real life’ language use”. Drawing further on this definition, we could say that a corpus (plural corpora) is a collection of such examples. This definition is helpful because it reflects the common sentiment in the literature that corpus linguistics is squarely focused on studying language use. This idea described by other scholars as a concern with “actual, attested, authentic instances of use” (Stubbs, 1996, p. 28) or “language use, as realised in text(s)” (Tognini Bonelli, 2010, p. 18) or “actual language used in naturally occurring texts” (Biber, Conrad, & Reppen, 1998, p. 1). Similarly, Teubert (2009, ¶ 11) situates corpus linguistics as “*parole*-linguistics”, drawing on Saussure’s distinction between *la langue* and *la parole* and claims “only the discourse is real”.

Research using corpora and techniques now associated with corpus linguistics pre-dates the 1980s, which was the point when the “corpus linguistics” label began being applied (McCarthy & O’Keeffe, 2010, p. 5). Modern corpus linguists can be connected with predecessors who employed “corpus-like” approaches (McEnery & Wilson, 2001, p. 2), sharing this concern with the study of language use. Paper-based corpora for developing dictionaries have actually been used for centuries (McCarthy & O’Keeffe, 2010, p. 4). Similarly, the tool that epitomises corpus methods, namely concordances, which are indexes of words in their linguistic context, have a long history of use in biblical scholarship (p. 3). However, it is computers that have defined the modern study of corpora. The late 1950s and early 1960s has been identified as the beginning of modern corpus research, with the first use of computer-based concordancing (p. 4) and the first corpus that could be processed by a computer (Tognini Bonelli, 2010, p. 15).

The development of corpus linguistics can be closely connected with the accessibility and co-option of computing technologies for storing, processing and sharing corpora (McCarthy & O'Keeffe, 2010). With increasing computing power, much larger corpora can be built and analysed. In practice then, corpus linguistics should be understood as a method that utilises computers to facilitate the study of language use. Correspondingly, corpora are typically large collections of examples stored in a standardised format (for example, text files, XML files or a database) that allows algorithmic processing by computer software.

Since there are different kinds of “real life” use, researchers who apply corpus methods attempt to build corpora that represent the specific varieties of language they are interested in studying. The British National Corpus (BNC), for example, was built to provide a general representation of British English (British National Corpus Consortium, 2007). Corpora can also be built to represent much narrower and more specific varieties of language, for example academic journal articles, political speeches, or media interviews. Typically, along with the language data itself, corpora are *annotated* with extra data that the researcher adds to the corpus for use in their analysis. These annotations include linguistic data, like tagging each word in the corpus with parts of speech information, but can also include non-linguistic data. For example, in the corpus built for the research reported in Chapter 5 each utterance in the corpus was be annotated with data related to the speaker (for example, their name and political party), allowing groupings of speakers to be analysed and compared.

Corpus methods allow the researcher to find evidence of repeated patterns or regularities of language use, and how these regularities related to “other linguistic and non-linguistic features” (Biber et al., 1998, p. 5). These non-linguistic features include groupings of speakers (for example, elected members of political parties), specific situations or contexts (for example, in parliament or in media interviews), or periods of time (for example, the period in government or in opposition) (p. 7). This makes corpus methods a relevant set of tools for examining social and political dimensions of language use, meaning it is significant for conducting social scientific enquiries more broadly. Corpus research usually takes the form of studies of the use of language features (for example, the word

“economy”) or analysis of “characteristics of texts or varieties” (for example, parliamentary discourse) (p. 7). Along with “linguistic norms”, corpora can also provide evidence of “rare or unusual cases of language use”, the exceptions to the norms of use (Baker, 2010, p. 6).⁴⁶ Both exploratory and confirmatory approaches to research are possible using corpus evidence. An exploratory approach works from patterns found in the corpus to explanation, while a confirmatory approach allows the researcher to test their suppositions about speech or written text against the examples of speech or written text found in the corpus (Baker, 2006).

More specifically, using computer-based corpus methods, researchers can study corpora to identify different kinds of linguistic regularities and language use. Software can be used to search a corpus for all instances of a word or phrase to generate *concordances*, which show a selected word or phrase with surrounding text as context. A concordance can be used to investigate the ways in which words or phrases are used. Software also allows statistical techniques to be run quickly on millions of words to identify frequently-used words and phrases, as well as examining words that frequently co-occur, which are referred to as *collocations*. Similarly, software allows the researcher to compare corpora (or portions of a corpus, referred to as sub-corpora) to detect similarities and differences in features and usage. In particular, the relative frequencies of words in each corpus can be compared to identify what are called *keywords*. This is referred to as *keyness analysis*. Features and patterns of usage can be compared across time to detect language change, or between different groupings of speakers or situations to detect variations in usage. Software is also important in relation to corpus building and annotation. For example, in the corpus to be discussed in Chapter 5 I wrote software to download the New Zealand parliamentary debates from the New Zealand Parliament website and then to split this up into individual speaker utterances, annotating this with information on the speaker and the specific context of the utterance. It is also very common to use software based linguistic taggers, like the Stanford CoreNLP Natural Language Processing Toolkit (Manning et al., 2014), to efficiently annotate a corpus with extra linguistic data, such as parts of speech information.

⁴⁶ See Hanks (2013) theory of norms and exceptions.

This description of a computer-based method that quantifies aspects of language use suggests that corpus linguistics is merely a quantitative method. Echoing previous scholars' reflections, Baker (2010, p. 10) rejects this as a “myth” about corpus methods. Key texts on corpus linguistics stress an interplay required between quantitative and qualitative techniques when analysing corpora (Biber et al., 1998, p. 4; McEnery & Hardie, 2012, p. 2), and in fact typically requires the key analytical move from viewing quantitative results (like frequency) to examining the underlying usage qualitatively using a concordance (Baker, 2010, p. 21).

Relating this more specifically to this research, there is a growing body of research applying corpus methods to analysing discourse (Sinclair, 2004; Partington, 2004; Baker, 2006; Mautner, 2009; Partington, 2013). Applying corpus methods to discourse is a relatively new trend for linguists. Writing in 2003, Partington (2003, p. 4) observed that linguists had underused corpus techniques for analysing discourse, attributing this in part to the lack of relevant corpora containing complete texts (rather than a portion). In that paper, Partington coined the term “corpus-assisted discourse studies” or “CADS” (p. 16), which he subsequently applied to research that does not apply this particular moniker (Partington, 2013). With both the increasing availability of affordable corpus analysis software and increasing accessibility of digitised texts to analyse, Partington (2004, p. 11) stressed the compatibility of corpora and discourse and argued that there was potential for there to be more research. In subsequent years it has become more common for linguists to build specialised corpora for discourse analysis (for recent reviews, see: Flowerdew, 2012; Thornbury, 2010). There have been a number of monographs or edited volumes published by linguists that apply corpus methods to various kinds of discourse analysis (for example, see: Baker, 2006; Hoey, Mahlberg, Stubbs, & Teubert, 2007; Biber, Connor, & Upton, 2007; Partington, Duguid, & Taylor, 2013).

There are a number of studies that have applied corpus methods specifically to political discourse (Partington, 2013; for recent reviews, see: Ädel, 2010).⁴⁷ This includes research that deals with political discourse as a variety of language that reflects institutions or settings, such as

⁴⁷ It should be acknowledged that an early and novel application of corpora in politics research was the PhD research of Janine Hayward (1995) in the 1990s, who examined the use of the “the crown”, a significant term in constitutional debates in New Zealand, using the Wellington Corpus of Written New Zealand English.

parliament (Bayley, 2004b) or White House media briefings (Partington, 2003), as well as topics that could be considered political, like representations of risk (Hamilton, Adolphs, & Nerlich, 2007) or refugees and asylum seekers (Baker et al., 2008). Most of this research has been conducted by linguists. But there is broader relevance, because analysing discourse is a common research task in the social sciences, including political science (Gee & Handford, 2012, p. 5; Wodak & Krzyzanowski, 2008). Corpus linguists, the most prominent example being Lancaster University's Centre for Corpus Approaches to Social Science (CASS), are promoting corpus linguistics as a methodological innovation for social science research.

The key aims of a “corpus-assisted” approach to studying discourse are to apply corpus methods to identify “non-obvious” patterns of usage as a way to either describe a setting and interactions associated with it *or* to identify ideological assumptions (Partington et al., 2013, p. 11). Baker, likewise, suggests that features of language, may indicate ideological assumptions within language (2010, p. 123). Baker goes on to posit that corpus approaches have the potential to “reveal repetitions or patterns which may run counter to intuition and are suggestive of discourse traces” and further, that “powerful discourses tend to be articulated repeatedly in language” (2010, p. 124).

4.3.2 Why study corpora?

To be clear, corpora are not required to study discourse or rhetoric. However, studying a corpus does allow researchers to address a number of significant problems. The various justifications for applying corpus linguistics can also be viewed as ways to differentiate studies based on corpora from alternatives. It is therefore useful to profile some of the reasons for applying corpus methods by comparing them with these alternatives.

First, in comparison to precursors who used corpus-like techniques, modern computing-based corpus linguistics allows fast processing of much larger corpora to study common patterns of language use. A computer allows the accurate processing of many menial operations or calculations in a very short space of time, including counting, searching, and sorting, as well as more complex calculations that compare or relate or abstract or summarise. To illustrate this McCarthy and O'Keeffe

(2010, p. 3) recall the biblical scholars that constructed concordances manually, claiming “computer concordancing programs replicate the work of 500 monks in micro-seconds”. A monk’s concentration and abilities would be stretched even more when it came to repeatedly performing more complex calculations, like the logDice measure of collocation:

$$14 + \log_2 \frac{2f_{xy}}{f_x + f_y}$$

Furthermore, the computer allows this to scale up, meaning that it is possible to build and analyse larger corpora in an efficient way. This is particularly relevant because the kinds of texts political (and other social) scientists are interested in studying are increasingly available online in ever growing quantities. This is most obvious in the texts produced by the institutions of politics in its narrowest, institutional meaning: governments, deliberative bodies, political parties and so on. Corpus methods offer tools to approach the problem or opportunity of dealing with unstructured and difficult to analyse textual “big data” that are too large to be approached in any manual fashion.

Second, we can compare corpus linguistics with approaches to language study that privilege the researcher’s intuitions. Scholars advocating corpus linguistics actually problematise researchers’ intuitions about language and posit corpus-based investigations as a way to overcome this.⁴⁸ Connected to the processing and storage capabilities of the computer, corpus linguists are quick to point out the limitations of human intuition and memory when justifying the use of corpora for research. For example, Reppen (2010, p. 31) claims that “when we are asked to reflect on language use, our recall and intuitions about language often are not accurate”. Compared with the ability of

⁴⁸ The stress by corpus linguists on overcoming intuitions highlights a fundamental disagreement with scholars who are critical of the study of language use. Influential critics, most notably Noam Chomsky, downplay or dismiss the importance of studying language use in favour of, what corpus linguist like Stubbs (1996, p. 28) critically characterise as, the study of “intuitive, invented, isolated sentences”. In this respect, corpus linguists’ emphasis on studying language use differentiates corpus linguistics from opposing methodological orientations more concerned with language as a system or the language capacity of humans. On one level this can be understood as philosophical debates about what language is or what linguists should study (McEnery & Wilson, 2001, pp. 5,19; Also, see: Teubert, 2009). In their exploration of this debate McEnery and Wilson (2001) frame this as a disagreement between rationalists and empiricists about what linguists should study. These positions can also be understood as assumptions about whether language is cognitive and individual or social (Teubert, 2009). However, this debate is largely irrelevant if, as it is in this case, our interest is not some meta-point about linguistics and what linguists should study, but about studying how people use language. There are parallels that could be drawn between the idea of studying lay people’s version of economists’ economics versus studying lay people’s use of *economy*.

computers to quickly and accurately interrogate large corpora, human ability is obviously limited. As Stubbs (2001, p. 66) suggests: “beyond a few hundred concordance lines at most, the amount of data is [...] beyond the capacity of unaided observation and memory”. Similarly, there are regularities, like collocation, that may only be able to be discerned using statistical analysis (Teubert, 2009, ¶ 24). This is not, however, simply a raw processing limit. It is likely that our intuitions about what is typical or acceptable are shaped by norms of language use in our language communities, as well as our propensity to attend to exceptions of language use rather than the norm (Xiao, 2009, p. 989). Furthermore, we simply may not have intuitions about language use outside our memory or experience (p. 989) (e.g. what were politicians saying about issue X 10 years ago). By using corpus methods researchers can challenge and augment their intuitions about discourse.

Third, we can compare corpus linguistics with studies that qualitatively engage with a limited number of texts. The main advantage of studying a corpus is the volume of examples of use, allowing the researcher to detect common patterns and potentially generalise about the use of these patterns beyond the examples stored in the corpus. Furthermore, using the same corpus, another researcher can replicate the analysis (Teubert, 2009, ¶ 23). In contrast, analysis of a few texts risks missing important patterns of use and is likely to reflect quirks of specific texts and the authors of those texts. These quirks may be what the researcher is actually interested in, but studying a corpus also provides a way to assess norms of use that an author is deviating from. In addition, corpus techniques allow the researcher to address the risk that a researcher might be accused of “cherry-picking” or selectively sampling texts that support their desired conclusions (Baker & Levon, 2015). Corpus methods are presented as a way for researchers, engaging in the critical and political forms of analysis typified by critical discourse analysis, to counter criticisms about political bias and a lack of analytic rigour, allowing the researcher to make more robust and verifiable claims (Mautner, 2009; Baker, 2006).

4.3.3 Problems or limitations of corpus methods

In the previous section I focused on the reasons why corpora are useful for studying language use, in particular focusing on problems with other methods that corpus linguistics offers the potential to

address. However, as much as it addresses problems, it also introduces problems or limitations, particularly in relation to analysing discourse. These are potential qualifications related to what can be claimed about research using corpus methods, and also provide a way to think about potential pitfalls in the process of corpus-based research.

4.3.3.1 What can corpus methods detect?

Firstly, it is crucial to understand limitations related to what corpus techniques can actually detect (Thornbury, 2010, p. 275). This can be thought of in terms of the kinds of patterns that can be detected and the data that can be analysed. If corpus linguistics is good at detecting frequent patterns, this is not to say that those patterns of usage are by themselves more important or influential than less frequent patterns. Frequencies say nothing about the effects of an utterance or how an utterance was produced, for example a statement by an influential speaker, or how it was received, for example the size of the audience (Baker, 2006, p. 19). Furthermore, while corpus methods (and the software used for corpus analysis) in the past have been attuned to detecting differences, interest in and techniques to deal with similarity, which again might be meaningful, are only now emerging (Taylor, 2013).⁴⁹ The onus is therefore on the researcher to take measures of similarity and difference and to interrogate the data behind these supposed differences or similarities.

In terms of what data can be analysed, the focus is on words (or lexis) (Baker, 2006, p. 17; Mautner, 2009, p. 141), and as Thornbury (2010, p. 276) points out “discourse is more than words”. In corpus analysis words are effectively used as a way to access the meaning and usage of an utterance, while it is combinations of words as well as other factors that matter with respect to this. Complicating this further is the changing meanings of words and variation in meaning between different people which is not revealed when stripping a word of co-text or context (Baker, 2006, p.

⁴⁹ Cutting across the search for difference or similarity is a characteristic of language use that puts this in perspective, which is that language use is not random. In a paper titled “Language is never, ever, ever, random”, Adam Kilgarriff (2005, p. 264) warns researchers applying statistical significance testing to corpora to find differences, stating that “[t]he problem for empirical linguistics is that language is not random, so the null hypothesis [of randomness] is never true”. Now, with the prevalence of corpora with huge amounts of data, it is basically inevitable that with enough evidence (that is, with a large enough corpus) the null hypothesis of randomness will be rejected. It should be noted that the basis of comparisons I am conducting in this thesis are primarily effect-size measures.

20). This is especially relevant in relation to the kind of rhetorical analysis proposed, as explained by Mautner (2009, p. 141):

... we ought to remind ourselves that concordancing software is biased towards the discrete lexical unit. Large-scale discursive phenomena, such as argumentative patterns, may be captured through corpus linguistic techniques, but only if they crystallize systematically around certain words, phrases or lexico-semantic patterns.

This is exactly what this research is trying to do, analysing argumentative patterns around usage of one word: “economy”.⁵⁰

It is one thing to study words as a way to approach issues of meaning and usage, however this still foregrounds what is in the text, not what is left unsaid. This has been discussed as an issue in the literature on corpora and discourse. Baker (2006, p. 19), for example, argues that shared unstated assumptions can be meaningful and powerful elements of a “hegemonic discourse”. This idea has a pedigree in the literature on ideology (for example, see: Eagleton, 1991), and has a wide relevance in social scientific scholarship (Gervais, Morant, & Penn, 1999, p. 420), including the critical social psychological work I am engaging with. In the literature on social representations, Good argues that: “aspects of a SR [social representation] within a close-knit community may never be articulated in the ordinary conversations between members of that community, because there is no need to do so” (1993, p. 175). However, Gervais et al. (1999) make the important point that there a number of different kinds of “absences”, of which unstated assumptions might only be one. They develop a typology alerting researchers to “theoretical, methodological, empirical and analytical” absences relevant when researching social representations (p. 423). In contrast, Michael Billig has focused on what is unsaid in relation to rhetoric and the role of common-sense in argument (for example, see: Billig, 1997, p. 51) and in his critical reflections on conversation analysis (Billig, 2006, pp. 20-21). He develops his ideas on this most fully in his book on Freudian repression (Billig, 1999a), in which he describes the fundamental relatedness of what is stated and unstated: “‘The said’ and ‘the unsaid’ are intimately linked: to say one thing implies that other things are not being said” (Billig, 1999a, p. 52).

⁵⁰ From the perspective of the rhetorical tradition, this enquiry will be logo-centric. In other words, by concentrating on words as evidence, there is potential to underplay other important factors in persuasive effect, for example affect or the status of the speaker (Aristotle, 2007).

Every utterance is also a silence. In part, this addressed by recognising the role of the researcher and corpus analysis as an interpretative task as I will discuss in Section 4.3.4. But, corpus linguists orienting to discourse typically posit this as a comparative kind of analysis, which offers the potential to understand absence in one setting against another (Partington, 2003, 2013; Partington et al., 2013).

4.3.3.2 Removing context?

Linked to what cannot be detected by analysing corpora is the issue of context. This revisits the comparison between qualitative analysis of texts versus analysis of corpora. Bayley (2004a, p. 34) observes:

Within most functional linguistics it is taken for granted that we should study entire texts and not isolated examples; it is taken for granted that meanings are made over long stretches of text and across texts, and that to understand a text we need to know something about the context of situation, the social positioning of speakers, etc. In a very large corpus this aspect of textual analysis is difficult, if not impossible, to recover.

Similarly, Baker (2006, p. 18) argues:

Questions involving production such as who authored a text, under what circumstances, for what motives and for whom, in addition to questions surrounding the interpretation of a text: who bought, read, accessed, used the text, what were their responses, etc. can not be simply answered by traditional corpus-based techniques, and therefore require knowledge and analysis of how a text exists within the context of society. One problem with a corpus is that it contains decontextualized examples of language.

Here the missed context includes textual context (which is sometimes referred to as co-text), inter-textual context, social context, knowledge of the speaker or author, and issues related to production and reception. These criticisms make sense in relation to the abstractions of quantitative analysis, for example a list of the most frequent words in a corpus. However, concordancing is typically thought of as a qualitative technique that foregrounds “keyword in context” (KWIC). Concordance results only give access to the immediate co-text to be “read vertically” (Tognini Bonelli, 2010, p. 19) though and therefore represent “decontextualized, semiotically reduced language” (Mautner, 2009, pp. 140-141). To be fair text-based analysis does not overcome issues of inter-textual and social context. These are

aspects the scholar must contribute through their analysis, which is probably impractical when dealing with large corpora (Bayley, 2004a, p. 34).

There are two broad responses to this. First, although Baker (2006, p. 18) is correct that “[w]e may not know” important contextual information, like “the ideologies of the text producers in a corpus”, in some instances we may actually know contextually relevant information, especially as corpus research of discourse moves away from large, general corpora to “specialised corpora”, which “can provide the degree of delicacy required to create an ethnographically sound definition of speech situation” (Bayley, 2004a, p. 34). The use of specialised corpora has been a key element of Alan Partington’s development of corpus-assisted discourse studies (CADS). In his early work he claimed that specialised corpora allowed a degree of control over contextual issues because they “remain relatively constant, or at least alter in relatively predictable ways” (2003, p. 4). In a recent paper, Partington (2013, p. 2) relates this specifically to parliamentary discourse, where political party, gender, and roles of speakers are known and can be used to annotate a corpus, allowing a variety of rich comparisons.

A second response to the problem of context is to incorporate closer qualitative readings of specific texts in a corpus to complement the corpus-based analysis (Partington et al., 2013, p. 11). Partington (2003, p. 11) suggests that recognising the “need to move between levels of analytic detail” entails moving between quantitative abstraction, concordance results, full transcripts, and, if available, audio or video recordings. In keeping with the discussion above, this should also allow a move to be able to see the dialogical context of each utterance, in relation to what has preceded it.

4.3.3.3 Accusations of arbitrariness

Given claims that corpus analysis adds rigour to the analysis of discourse, there is an almost inevitable counter to this in that there are a number of, potentially arbitrary, choices that a researcher must make when analysing corpora that can impact the results and findings. This relates first to choices about what kind of analysis to conduct, and as Baker (2006) demonstrates there are a number of different corpus techniques for studying discourse. This also relates to a number of technical choices with each

corpus technique. For example, when conducting analysis of collocations, which involve statistical representations of associations between co-occurring words, there are choices over the specific statistical measure to use (with each having its own characteristics) and parameters of analysis (e.g. the “span” of words to consider for collocated words) (for example, on different collocation measures, see: Baker, 2010, pp. 24-25). While there are some conventions around what corpus techniques to apply to what research question, or what are considered valid technical decisions, without explanation or justification these decisions are arbitrary. By making their decisions explicit and justifying them, a researcher makes their analysis open to replication, as well as opening their choices up to be assessed and challenged by other scholars.

4.3.4 Analysing corpora as an interpretive task

So we need to bear in mind that because corpus data does not interpret itself, it is up to the research to make sense of the patterns of language which are found within a corpus, postulating reasons for their existence or looking for further evidence to support hypotheses. Our findings *are* interpretations, which is why we can only talk about restricting bias, not removing it completely. A potential problem with researcher interpretation is that it is open to contestation.

(Baker, 2006, p. 18)

Shifting from discussion of benefits to problems with corpus methods entails an associated shift in focus then from the potential of the corpus and computer-assisted techniques to the corpus researcher themselves. The researcher’s role is key (and then potentially problematic as criticisable in Baker’s characterisation) in overcoming limitations of the computer-enabled abstractions and making the interpretive and argumentative moves required for analysis. Although corpus methods offer researchers techniques to approach the study of collections of texts, and potentially very large collections of texts at that, as Baker points out in the quote above: “corpus data does not interpret itself”. A similar point is made by Teubert (2009, ¶ 35), who states that corpus methods “may well deliver dependable and reproducible results. But these results do not tell us much. They need to be interpreted”. This is reflected in the key analytic move from abstractions and patterns to interpretation required for applying corpus methods to discourse, which has been described as a “cyclical alternation between counting and interpreting” (Thornbury, 2010, p. 282). The preceding discussion of problems

and limitations with corpus methods demonstrated a range of ways that a researcher is required to intervene through decisions, justifications, and interpretation when analysing corpora. With these issues in mind, studying a corpus should be understood as a human-led, interpretive enterprise (Teubert, 2009, ¶ 35).

As Teubert (2009) emphasises in relation to corpus methods, the interpretive task is not an unproblematic one because an interpretation is necessarily limited as just one possible interpretation and there is no escape from this through method. There is real tension then around claims of the “scientificity” of corpus methods in relation to discourse (Teubert, 2009, ¶ 23) , which are expressed in the literature on corpus linguistics in a variety of ways (impartiality, generalisability, representatively, validity, reliability, rigour, and robustness). Scholars’ rhetorical alignment of corpus methods with the scientific method is in part a critique of alternative, not-so-scientific research that privilege human judgements, but paradoxically the human aspects of corpus methods cannot be avoided and remains a potential target of criticism.

Balancing any discomfort regarding the criticisable role of the researcher are, however, compelling questions about the limits of methods in overcoming the need for interpretation in social scientific enquiry (Flyvbjerg, 2001; Sayer, 2000, 2010) and the related risk of overconfidence in method. Issues around interpretation are not unique to corpus methods and exemplify an issue of wider methodological significance in the social science research. Challenges to the prospect that social science can be conducted “scientifically” simply by adhering to specific methods reflect fundamentally different assumptions about what exists, what we can know, and how we can know it (Furlong & Marsh, 2010; Sayer, 2000). Addressing this interpretive dimension, Sayer (2000, p. 17) states that “social phenomena are intrinsically meaningful, and hence that meaning is not only externally descriptive of them but constitutive of them [...] Meaning has to be understood, it cannot be measured or counted”. Flyvbjerg (2001, p. 32) puts it more succinctly, stating: “in social science, the object [of study] is a subject” and argues that social scientists cannot reasonably assume that the interpretations of these subjects are static. Social phenomena, in this view, are complex, dynamic and contingent, constituted by an “open-ended, dependent relation between contexts and actions and

interpretations” (pp. 47-48). The implications of this are both theoretical, in that social phenomena are not conducive to the kind of “rule-based closure” (p. 48) exemplified by theories in the natural science, and methodological, suggesting that social scientific enquiry should properly attend to this interpretive dimension (p. 140).

Although formal (and especially quantitative) methods offer social scientists the apparent rigour of set, replicable procedures, the results of all social scientific research is arguably subject to interpretation. To illustrate this we can consider a period of critique of social psychology in the 1960s and 1970s referred to as “the crisis in social psychology” (Augoustinos et al., 2014, p. 4; Hepburn, 2003, p. 24), where it was argued that formal experimental procedures, as much as they attempt to conform to an ideal of good science, provided no escape from criticism related to the role of the researcher, the appropriateness of generalising beyond the contrived experimental situation, and problems connecting experimental results to their historical, social and ideological context (Augoustinos et al., 2014, p. 5).⁵¹ These criticisms are born out in the numerous re-examinations and reinterpretations of iconic social psychology experiments, like Stanley Milgram’s (1963, 1974) studies of obedience. A recent analysis of recorded interactions between experimenters and subjects, for example, challenged both the account of the procedure described by Milgram and whether the behaviour observed fitted his conceptualisation of obedience (Gibson, 2011). Ignoring this interpretive dimension of social scientific enquiry (for example, by ignoring matters of context in relation to experiments or corpus analysis) can still be considered an interpretative act, just a potentially deficient one.

This discussion put some of the hesitations around the use of corpora for analysing discourse in perspective. That interpretation is required could be seen by some as problematic, believing that a researcher may interpret their findings to align with their expectations or values. However, this neglects that similar interpretive moves are characteristic of all social scientific enquiry. Social scientists should therefore remain self-conscious about how specific methods obscure this interpretive dimension.

⁵¹ Augoustinos et al. (2014, p. 6) indicates that this was not resolved.

4.4 Corpus methods for rhetorical psychology?

The previous sections explored issues in the use of corpus methods for studying discourse. I now explore synergy between corpus methods and rhetorical psychology philosophically, in terms of their shared orientations to interpretation and studying language use. In the course of the discussion that follows I will also address relevant issues raised in discussion of quantitative textual analysis and conversation analysis in Billig's writing on rhetorical psychology. I indicate the crucial point that discursive-rhetorical psychologists may be wary of in this kind of analysis, which is that corpus methods potentially de-situate the utterances or texts being analysed from their immediate interactional context.

Corpus linguists have suggested that corpus methods could be relevant for social psychological research on explanations, which could be understood to include lay people's theories, particularly as studying "*naturalistic* data", both written and spoken, overcomes problems with the contrived nature of the laboratory (McEnery & Wilson, 2001, p. 129). Studies applying corpus methods in social psychological research, however, are not common and are absent in research published by rhetorical and discursive psychologists. Perhaps the earliest study using corpus methods in social psychological research, Antaki and Naji (1987)⁵², studied statements featuring the word "because" in a corpus of conversational speech as a way to examine the relative frequencies of different kinds of attributions. They found that although social psychologists had focused theoretically on the actions of people these appeared to be relatively infrequent. Reflecting on this study, McEnery and Wilson (2001, p. 130) argued:

... work such as Antaki and Naji shows clearly the potential of corpora to test and modify theory in subjects which require naturalistic quantifiable language data, and one may expect more social psychologists to make use of corpora in the future.

Despite the claimed potential of using corpus methods for psychological investigations, studies like this have been rare.

⁵² Interestingly, Charles Antaki was later a colleague of Michael Billig in the Loughborough University Discourse and Rhetoric Group and his subsequent work was an advocate for the use of conversation analysis.

A corpus linguist, Andrew A. Wilson (2012, pp. 69-70), recently commented that while there is research that use corpora or are “corpus-based”, there had been a lack of research integrating depth psychology and corpus linguistics in the manner of his study. This lack appears to be something that can be generalised as more widespread in psychological research, even in discourse-oriented psychological perspectives. Studies might use a corpus but, rather than using corpus methods, deploy a variety of approaches for analysis, including “computer-assisted content analysis” (p. 70) , or a variety of text mining techniques, as has been deployed by social representations researchers (Chartier & Meunier, 2011; Lahlou, 1996), or use “computer assisted qualitative data analysis software” (CAQDAS) (MacMillan, 2005) (e.g. *NVivo*). Discursive psychologists also refer to their samples of texts as corpora (for example, see: Kurz, Augoustinos, & Crabb, 2010, p. 606), although they typically deploy conversation analysis to study the separate transcripts. So, using a corpus or referring to a collection of texts as a corpus, does not mean that corpus methods are being deployed. Different methods and different statistical techniques or algorithms incorporate different assumptions and there is potential that software and method can be conflated (Chartier & Meunier, 2011) or that software constrains analysis (MacMillan, 2005).

This synthesis is novel then, because corpus methods have not been overtly utilised in relation to rhetorical (or discursive) psychology and therefore lacks both a clear rationale and examples of their use. Some relevant issues have, however, been raised in relation to criticisms of quantitative and computational analysis of texts, which will be addressed in the discussion to follow. Although this discussion is focused on whether there is relevance for rhetorical and discursive psychologists, this has wider relevance and adds to arguments and literature regarding the applicability of corpus methods for social scientific research. The arguments that follow will be re-evaluated further in Chapter 7 by drawing on the experience of the analysis performed in the studies.

4.4.1 Cohesion around interpretation

The interpretive stance I have set out for corpus methods is consistent with the methodological orientation of Michael Billig in his studies of rhetorical psychology. In his postscript to an edited

volume that presents “a casebook of methods” for “analysing everyday explanation” (Antaki, 1988b), Michael Billig (1988) advocates an “anti-methodological stance” (1988, p. 199) and argues that the interpretive dimension of social scientific enquiry more appropriately fits the orientation of the “traditional scholar” rather than the “modern methodologist” (p. 200). While Billig’s caricature of the methodologist retreats into the anonymity of procedure to escape critique and accusations of bias, there is “a burden of responsibility upon the scholar” for the interpretations they produce (p. 214). Key to the interpretive work of the scholar is their “background knowledge” and purposeful reading beyond the particular texts in question (p. 207),⁵³ which are always incomplete, as well as judgments about “whether a piece of evidence is important or not” (p. 214), which can always be contested. The methodologist, in their narrow focus or “reading” abdicates these judgments to method, and therefore risks a deficient analysis. Rigour or robustness does not, therefore, inhere in methods, and this is replaced instead by an orientation to and accountability to a community of scholars, with the consequent acknowledgement that a scholar’s work will become the focus of attention and critique by other scholars. In this depiction, scholarship is dialogical and rhetorical, in that it is oriented to the work of other scholars, drawing on and critiquing other scholarly work, as well as recognising the community of scholars will critically engage with this work and offer their own interpretations (p. 215).⁵⁴

On the surface, Billig’s anti-method advocacy of scholarship could be considered an argument against the use of “up-to-date” (p. 199) methods like corpus linguistics, especially given his comments on the limitations of another method of textual analysis that utilises quantitative techniques. However, elsewhere Billig has offered comments on method that put his scholarship argument in perspective. Around the same time as this paper he published a collection of studies, rationalising the use of different qualitative methods (1991, p. 22) and co-authored a book that

⁵³ This argument also puts the “cherry picking” argument in perspective because significant texts are significant. Cherry picking might be very sensible if the texts are significant. In the end, these are arguments about what texts are relevant (that are criticisable).

⁵⁴ This is consistent with what Teubert (2009) refers to as the “interpretive community”. The idea of the community of scholars is not unproblematic in practice. To the extent that communities of academics mark themselves out according to theoretical and methodological divisions and concentrate their reading and engagement within, rather than across, these communities (Billig, 2013), then the community of “modern scholars” (contrasting this with Billig’s “traditional scholars”) potentially falls short of this ideal.

suggested the qualified relevance of quantitative survey methods, although still stating a “preference for the qualitative study of discourse” (Billig et al., 1988, p. 21). Subsequently, Billig co-authored a paper detailing problematic approaches to discourse analysis (Antaki, Billig, Edwards, & Potter, 2003), offered a procedural description of how someone could go about discourse analysis (1997/2013, pp. 104-105), co-authored a paper that included quantifying a language feature (Billig & MacMillan, 2005), and critiqued the way social psychologists “depopulate” their descriptions and discussions of experiments by routinely removing traces of the specific people they are studying (1994), a critique he has extended to the social sciences more generally (2013). So, Billig’s advocacy of scholarship should, therefore, be understood as a provocation that methods offer no escape from issues related to interpretation. Additionally, this implies that all academic work relies on arguments about evidence (although some this is buried in the assumptions of a method) and therefore academics should be critically oriented to other scholars’ arguments and expecting the same kind of scrutiny in return.

Part of Billig’s (1988, pp. 203, 206-207; also, see: Billig & MacMillan, 2005) paper on scholarship directs critical attention to content analysis, as a method that attempts to quantify language. Billig (1988, p. 206) is negative about the usefulness of the quantification of texts, which essentially “count words”, but “cannot interpret them”. He goes on to state this more definitively, stating: “Interpretation cannot be achieved by handing over the whole business of scholarship to a programme of computation” (p. 207). Billig’s criticisms are based on his experience with a psychological study of fascists (1978, Chapter 4), in which argues against analysis based on the frequency of words, because this does not indicate how a word is being used, for example “to ridicule or refute” (p. 64). In response to this it should be stated explicitly that content analysis and corpus linguistics are not the same thing and that content analysis typically involves the interpretive step of categorising segments of text (as was the approach in Billig’s 1978 study) rather than simply counting words. Although there may be confusion about corpus linguistics as a purely quantitative method and there may be academics that approach the study of corpora in this way, this is not in keeping with the approach to studying corpora that I have described, which makes analytical moves between levels of

abstraction to the actual individual texts. Billig's criticisms of quantifying texts would probably reflect the positions of most scholars writing on corpus methods.

There is consistency between Billig's anti-method scholarship and the position I have set out on the interpretive dimensions of corpus methods. More specifically, there is consistency if we think of the results of corpus analysis techniques, like concordances or collocation results, as a way of citing multiple texts to provide evidence of the scholar's research. Corpus methods are consistent with Billig's scholarship argument if we think of corpus results as a kind of reading, which should not be dismissed as merely a "distant" (Moretti, 2013)⁵⁵ or "vertical" (Tognini Bonelli, 2010, p. 20) reading if it represents moves between distant and close readings in the course of analysis. This could be viewed as consistent with Billig's recommendations to "read as widely as possible" (1988, p. 200). Furthermore, in emphasising the "quirkiness" of the scholar (p. 200), Billig understates expectations that scholars will explicitly address the texts being referred to, analysed and critiqued, the modern convention being the academic citation, although this has a much longer tradition (Grafton, 1999). With details of the specific texts that make up the corpus and the procedures applied this could be considered akin to academic citations to multiple texts that other scholars can reconstruct, revisit, or "replicate". In fact, with the increasing publishing of web-based corpora and analysis tools, corpus results could be cited using a URL. There is merit then in detailing the assembly of texts into a corpus and making these available if possible to both allow others to revisit the texts and so as not to reproduce problems already mentioned related to the researcher's role in the collection of "contrived" data.

4.4.2 Cohesion around the study of language use

I began this chapter by raising the relevance of the study of political arguments and ideas "in the wild" as a way to take talk and text seriously as crucial evidence in political research. I drew on the arguments of discursive psychologists, Potter and Hepburn (2005), to suggest studying actual examples of language use, or "naturalistic records", as a promising alternative to the self-report

⁵⁵ I am borrowing "distant reading" here from Franco Moretti, a digital humanist. He is not referring to corpus methods, but is primarily referring to the much more abstracted "readings" of digital humanists, like topic modelling and network analysis.

methods that have been favoured in previous research on lay people's theories of the economy. I then discussed corpus methods as a way in which linguists approach studying "examples of 'real life' language use" (McEnery & Wilson, 2001, p. 1). There is already implicit cohesion between rhetorical psychology and corpus methods around the study of language use. However, there is one conceptual issue that needs to be teased out, as well as the need to address a common way in which discursive psychologists approach the study of language use, through the techniques of conversation analysis.

Language use has both theoretical and methodological significance in work on rhetorical and discursive psychology. However, this encompasses two distinct aspects that need to be made clear in considering cohesion between rhetorical psychology and corpus methods. This is captured in Billig's description of discursive psychologists' orientation to the "materialistic, pragmatic study of the ways that people use language" (2009, ¶ 8). Put more simply, we can differentiate specific *language use* from how people *use language*. The former, "materialistic" orientation, reflects the idea that discursive psychologists' orient to studying "particular utterances" (Potter & Wetherell, 1987, p. 14), which include both "text and talk" (Augoustinos et al., 2014, p. 296). The latter, "pragmatic" orientation considers how "[p]eople use language, like a tool, to get things done" (Potter & Wetherell, 1987, p. 18). Rhetorical psychology, understood as a particular kind of discursive psychology, more specifically orients to how people use language argumentatively.

In marrying rhetorical psychology and corpus methods, there is broad cohesion around the idea that both are concerned with studying instances of language use. If corpus linguistics is a "*linguistique de la parole*" (Teubert, 2009, ¶ 66), then discursive psychology could be thought of as a *psychologie de la parole* (see: Billig, 2009, ¶ 7). However, in terms of the pragmatic orientation to how people use language, this concerns understanding contextual factors, which as I have argued is a limitation of corpus methods. There is nothing intrinsic to a corpus or corpus methods that allow a researcher to read off what people are doing through an utterance. However, in being able to demonstrate and interrogate norms of language use through corpus analysis, in being able to inject an understanding of context in the process of building a corpus that can be later used in analysis, and in being able to use a corpus to navigate from abstractions to actual texts, a corpus can be approached

from a pragmatic orientation (Rühlemann, 2010). And, this again returns us to the need for interpretation in any textual or social analysis.

To conclude, a crucial point of distinction between corpus methods and much of the work in the discursive-rhetorical tradition is attention to “the micro-interactional” applying conversation analysis (Gibson, 2015, p. 2). As discussed in Chapter 3 (see Section 3.4) a key difference of the rhetorical perspective from other discursive psychological perspectives is attention to the ideological and argumentative context that transcends the interactional context (Billig, 1987, 1991, 1999b). Although I acknowledge there is the potential that corpus methods could de-situate utterances from their situational context and I anticipate this criticism, there is also the potential to examine common features of linguistic expression to examine common features of rhetoric, including ideological and argumentative goals that persist over time. The corpus-assisted approach I have articulated in this chapter does involve analytic movements to specific texts or utterances and even to the interactional context. As this is a novel synthesis, the “proof” is in the demonstration.

4.5 Introducing two corpus-assisted studies of the rhetoric of the economy

In this section I introduce the two studies that are reported in Chapter 5 and Chapter 6 and explain the rationale of these studies in relation to the overall aim of rethinking lay people’s theories of the economy. Both studies, in keeping with the “in the wild” orientation I have been developing, analysed corpora featuring public utterances that included the word *economy* in settings that often feature argumentative discourse. Both studies involved building and analysing “specialised corpora” (Partington et al., 2013, p. 12). The aim of both studies was to use corpus methods to identify linguistic regularities as potential evidence for common features of the rhetoric of the economy. I was interested in understanding key assumptions, forms of argument, and points of disagreement in these two settings. However, the two studies addressed different aspects of public thinking about the economy.

The first study (see Chapter 5) examined rhetoric related to the economy in New Zealand's parliament by comparing how speakers from different political parties used the word *economy*. The second study (see Chapter 6) studied how people speaking on talkback radio calls used the word *economy*. These studies were complementary and related. Specifically, the parliamentary study was intended to provide a rigorous understanding of features of political rhetoric related to the economy over a number of years to provide a context to understand the specific slice of time where people were using *economy* in talkback interactions. The purpose of studying parliament was to specifically attend to the argumentative context of the economy in relation to contemporary party politics. In addition, as proposed in Section 3.4.2, I was interested in the possibility that professional politicians' use of *economy* might serve as an exemplar to understand a political way of thinking about the economy that could inform the second study. Studying talkback calls provided the opportunity to observe people using *economy* in a setting that was naturalistic and not contrived by the researcher (see Chapter 4). Talkback has previously been identified as a setting that provides the opportunity to study "lay" kinds of thinking (Hutchby, 2001, p. 481; Hanson-Easey, Augoustinos, & Moloney, 2014, p. 362; Hanson-Easey & Augoustinos, 2017, p. 153). These studies were together intended to provide a basis for rethinking lay people's theories of the economy.

The relevance and limitations associated with the settings chosen are discussed in the background sections of the respective chapters (see Section 5.2 and Section 6.2). However, in terms of indicating the dual relevance of these settings, I undertook some preliminary analysis using a corpus that was used as a point of comparison in the talkback study reported in Chapter 6 (see Section 6.3.3). The Wellington Corpus of Spoken New Zealand English (WSC) contained transcripts of different categories of spoken texts, including parliamentary debates and talkback radio, but also private conversations and media broadcasts. The word *economy* was absent or uncommon in private dialogues contained in the corpus (e.g. no one said *economy* in their sample of transcribed telephone conversations). It was a more common feature of media broadcasts, particularly in transcripts of news bulletins. The two categories in the WSC that on average featured the word *economy* the most were

parliamentary debates (0.333 per 1000 tokens) and talkback radio (0.262 per 1000 tokens). This indicated that these were settings where we could expect to find people using the word *economy*.

4.5.1 Legal and ethical considerations in relation to the two studies

The choice of studying naturalistic records (see Section 4.2.2) avoids some of the ethical concerns related to recruiting participants and eliciting self-reports. This was pertinent given my experiences running the pilot study of focus groups discussed in Section 4.2.1 and the treatment of “lay” subjects in past research on lay people’s economic thinking. During the groups discussion I found it difficult to create a setting for people to talk “economy” in a natural way, either spontaneously or via prompting. I was subsequently uncomfortable about analysing prompted instances of people talking where they demonstrated resistance to my prompts. Thinking further about past studies of lay people’s economic thinking sedimented my concerns with eliciting self-reports. In past research by economists and economic psychologists that have explicitly used economists’ knowledge or reasoning as a reference point (discussed in Chapter 2) the predictable deviations of lay participants from expert economists was frequently cast in problematic terms. However, this relied on eliciting responses to a structured representation of economic knowledge that privileged and reproduced expert perspectives while actively closed off lay perspectives. Studying a corpus of naturalistic records offered the opportunity to study people using *economy* without the need to contrive a situation to produce “naturalistic” dialogue and without the politics of economic knowledge that is embedded in structured surveys or interviews.

Studying naturalistic discourse using corpora mitigates risks related to working with human participants, however there are still legal and ethical issues with this form of research. Both studies required building corpora by collecting examples of language use that were made by third parties with the active participation of speakers and that were made accessible in a digital form to the public. In the case of the study described in Chapter 5, these digital records were the official records of the proceedings of New Zealand’s parliament that were available on the website of New Zealand’s parliament and contained transcripts of the speech of Members of Parliament (MPs). In the case of the

study described in Chapter 6, these digital records were audio streams of the radio broadcasts made available by two talk radio stations and included audio of speech by talk radio hosts, newsreaders, media representatives, experts, public figures and members of the public who phone in to participate in talkback radio shows. I will first discuss legal and ethical issues in creating the two corpora and then the ethical treatment of the speakers themselves.

According to McEnery and Hardie (2012, p. 57), “[t]he most fundamental issue in corpus construction is whether or not you have the legal right to gather and distribute the data you intend to include in your corpus”. Transcripts of parliamentary proceedings, that were the basis for the New Zealand Parliamentary Language Corpus built for the analysis described in Chapter 5, are explicitly excluded from copyright in legislation (McGee, 2005, p. 63). The parliament.nz website explicitly states that parliamentary proceedings are in the public domain, are “not covered by copyright” and “are free to re-use [...] without a license” (Office of the Clerk/Parliamentary Service, 2018). This legal status provides the right to build the corpus for the study in Chapter 5 and make it available to the public and other researchers. In the case of the audio corpus built for Chapter 6, research on the two radio stations was specifically permitted under the University of Canterbury’s Screenrights license (University of Canterbury, 2018). Under the license researchers are permitted to download, copy, and retain audio for the purposes of their research and this provided the basis to build and store the audio corpus. I will not make the audio corpus public.

The records contained in the two corpora have been created without the participation of the researcher and the speech being analysed is the result of people speaking “in the wild”. People speaking are aware that their utterances are broadcast in public. In the case of parliamentary debates, parliamentarians speak knowing that their speeches will become part of the parliamentary record and are available via different mediums, including live television broadcasts and video and text transcripts available online. In the case of talk radio the speech is broadcast via radio and internet. People speaking on talk radio are paid representatives of the radio stations, guests invited to present their views, or members of the public actively phoning in to engage in discussion and make their voice heard. As Hanson-Easey and Augoustinos (2017, pp. 152-153) suggest in their discussion of the ethics

of analysing talkback radio calls, that utterances on talk radio “exist in the *public domain*” does not preclude a requirement for ethical treatment of people whose speech is being analysed. They specifically raise the need to avoid criticism of the callers themselves and focus “on the sense making of speakers” (p. 153). This principle should equally be applied to the analysis of parliamentary debates.

4.6 Summary

This chapter discussed how to I intend to approach the study of lay people’s theories of the economy. The argument presented in this chapter draws on the criticisms of key assumptions in previous academic research discussed in Chapter 2 and Chapter 3. This chapter suggests how previous research reproduces these assumptions in the way they research lay people’s thinking. In proposing to study use of the word *economy* in naturalistic records I then argued for the relevance of corpus methods to study discourse and critically evaluated the use of corpora. I suggested that despite the quantitative engagement with texts that is associated with corpus methods, this should be understood as an interpretive approach to discourse with a key role for the researcher in analysis. I then proposed the potential cohesion between the philosophical orientations of corpus linguists and proponents of discursive-rhetorical psychology. The chapter concluded by introducing the two corpus-assisted studies of the rhetoric of the economy: a study of the use of *economy* in New Zealand’s parliament by political parties that is reported in Chapter 5; and, a study of the use of *economy* by people on talkback radio calls that is reported in Chapter 6.

Chapter 5 A corpus-assisted study of the rhetoric of the economy in New Zealand parliamentary debates

5.1 Introduction

In the preceding chapters I have developed an argument for the relevance of an “in the wild” perspective that takes seriously the study of public rhetoric related to the economy to deepen our understanding of lay people’s thinking. In Chapter 4 I addressed the practicalities of this “in the wild” perspective and proposed the relevance of a “corpus-assisted” approach (Partington, 2004, 2011; Partington et al., 2013). Specifically, I proposed to build and analyse corpora to examine patterns of use of the word *economy* and to use these to identify common features of the rhetoric of the economy. These features then provide a basis for rethinking lay people’s theories in the economic domain in the remaining chapters. In this chapter I report on the results of a corpus-assisted study to examine the rhetoric of the economy in New Zealand’s parliament.⁵⁶ The aim of the study was to identify common features of political rhetoric related to the economy in prominent political debates in New Zealand. These common features include common assumptions, common patterns of argument, and common points of controversy.

This study contributes to the argument of the wider thesis in two key ways. Firstly, it develops an understanding of the rhetorical *context* of struggles related to the economy in contemporary party politics in New Zealand, which sets the groundwork for the study described in Chapter 6. As noted earlier (see Chapter 2 and Chapter 3), this attention to context is a departure from previous research that has tended to decontextualise people’s thinking and privilege the kind of

⁵⁶ The New Zealand Parliament has a specific technical meaning, which is that it “is the representative assembly (House of Representatives) of elected members of parliament together with the governor-general” (J. E. Martin, 2015, p. 141). The term parliament, especially when concerning debates in parliament, is often used to refer to the House of Representatives.

abstracted and axiomatic theorising that is more characteristic of economists' thinking. Secondly, in contrast to previous research that backgrounds the political nature of economic ideas, I explore the potential to foreground parliamentary rhetoric as an *exemplar* of a political way of thinking about the economy that contributes to our understanding of lay thinking.

Critics might argue that a study of the rhetoric of political elites is unhelpful and even irrelevant to understanding lay people's thinking related to the economy because parliament is an institution embodying politics in its most "narrow and formal" incarnation (Hay, 2007, p. 62). However, while there is a very specific institutional context that shapes what is said in parliament, I argue that parliamentary debates transcend the immediate setting. In an idealised sense, this is the whole point of parliamentary proceedings: they transcend the immediate context and moment, involving debates between the representatives of the people about issues that affect the people they represent (McGee, 2005, p. 4). Furthermore, although I am studying the speech of political elites, I argue that their ideas and arguments are oriented to and therefore relate to the wider political community they represent (van Dijk, 2004, p. 360; Ilie, 2015, 2016).

To conduct this study I built an annotated data-set, the New Zealand Parliamentary Language Corpus (NZPLC; Ford, 2016), based on the official records of the proceedings of parliament, known as the *New Zealand Parliamentary Debates* or *Hansard*.⁵⁷ The process of building the corpus is explained in Appendix A: Building the New Zealand Parliamentary Language Corpus (NZPLC). I also designed and wrote new software to assist in analysing the corpus. The 57 million word NZPLC corpus featuring utterances of Members of Parliament (MPs) in New Zealand's parliament spanning February, 2003 to March, 2016. Each utterance in the corpus was annotated with the speaker's political party and the date of the utterance, allowing comparisons between the speeches of representatives of political parties as well as comparisons of patterns of usage by political party members between different parliamentary terms. The NZPLC is a key contribution of the study

⁵⁷ See Section 4.5.1 for discussion of legal and ethical issues related to building and analysing a corpus based on *New Zealand Parliamentary Debates*.

described in this chapter and the thesis as a whole (see Section 7.3.2) as it opens up a range of interesting possibilities for research on New Zealand's parliamentary politics.

5.2 Background on parliamentary debates in New Zealand

There is startlingly little research using parliamentary debates in New Zealand. In this section I discuss this neglect of the parliamentary record and suggest why debates in parliament are important. I then briefly examine potential issues with using parliamentary debates and more specifically the official records of parliamentary proceedings in the way I do in this study. I conclude this background section by discussing the selection of parties whose utterances were studied.

5.2.1 Research on New Zealand's parliamentary debates: neglected but important

Researchers who study parliamentary discourse often emphasise the importance of language to understanding parliaments as institutions and the kind of politics that inhabits it (for example, see: Bayley, 2004a; Ilie, 2015). The word *parliament* itself encodes its origins as a “site of discussion, of debate” (Bayley, 2004a, p. 12). However, while there are descriptions of parliament's procedures and practices related to speech (McGee, 2005), scholars have not had much to say about what is said in New Zealand's parliament. A 1983 paper analysing speeches in New Zealand's parliament reflected on the lack of research using parliamentary speeches in research on New Zealand politics by concluding that “the words inscribed in *Hansard* might as well appear in an invisible writing” (Horn, Leniston, & Lewis, 1983, p. 265). Interestingly, the authors of that paper indicated the potential for future researchers to use the storage and access capabilities of computers to facilitate research on parliamentary debates and to correct this neglect (p. 259). However, it is more than thirty years since those comments, and despite parliamentary records having been available in digital forms since 1987 and publicly available in some form on the web since 2002, research systematically analysing debates in the New Zealand parliament has been rare (for exceptions, see: Ladley, 2006; Loginova, 2013).⁵⁸

⁵⁸ Political scientists do routinely cite specific speeches from parliament, but here I am flagging the general oversight of parliamentary speech.

Parliament is clearly an institution that is important to New Zealand's constitutional arrangements and party politics (K. Jackson, 2006; J. E. Martin, 2015; Duncan & Gillon, 2015; Hayward, 2015a). Key texts on New Zealand politics (Mulgan & Aimer, 2004; Palmer & Palmer, 2004; K. Jackson, 2006; Shaw & Eichbaum, 2011; J. E. Martin, 2015; Miller, 2015) emphasise the constitutional role of parliament as "supreme lawmaking institution" (J. E. Martin, 2015, p. 141), meaning parliament's law-making powers are both concentrated (in a single house of representatives)⁵⁹ and unchallenged.⁶⁰ This power to legislate is not to underestimate the power of governments in controlling and executing the "legislative agenda" of parliament (Miller, 2015, p. 34),⁶¹ however integral to this legislative function are institutional processes which allow the elected representatives of the legislature to publicly debate each item on parliament's agenda.

That parliament is important should be enough of a reason for scholars interested in New Zealand politics to pay more attention to what is said in the debating chamber. However, while the arguments made by representatives in parliament are unlikely to influence governments or change the votes of other MPs, these debates are part of a process that "results in [...] concrete action in the outside world, establishing regulations as to what must, may and may not be done in a given society"

⁵⁹ Legislative powers have been concentrated in a single chamber since 1951 when an upper chamber known as the Legislative Council was abolished (J. E. Martin, 2015, p. 143), meaning that New Zealand's Parliament is unicameral.

⁶⁰ Apart from some limited constitutional exceptions (for discussion of the Bill of Rights Act 1990 and the Constitution Act 1986, see: J. E. Martin, 2015, pp. 142-144), the current parliament cannot pass laws that restrict the ability of future parliaments to make laws and the current parliament is also not restricted in its ability to pass laws by the laws passed by previous parliaments. Similarly, the role of the courts is limited to interpreting the law and local government powers are established and amendable by parliament. Scholarly and public debates continue on whether or how to limit these sovereign powers (Hayward, 2015a, p. 138).

⁶¹ Prior to the introduction of a system of proportional representation, this equated to an "elective dictatorship" (Miller, 2015, p. 34) which allowed single party majorities to control both legislature and executive and enact rapid changes. The primary constitutional check on these powers was the requirement to hold regular elections (Hayward, 2015a, p. 131). Given parliament's institutional importance within a system that has historically allowed for and has produced rapid and radical law-making and given that the laws passed in parliament are primarily the government's laws and potentially opaque in terms of a public process prior to their introduction it is perhaps understandable that little attention has been paid to the debates that are almost incidental to the outcomes it has produced as a legislating institution. It is also useful to acknowledge at this point scepticism that is perhaps common-place among the public, political commentators and some political scientists about speech in parliament. A recent editorial, which reflected on a commentator's visit to parliament, contrasted the adversarial, trivial and theatrical nature of what happens in the course of parliamentary debates with what he considered were the productive, consensual, problem-oriented work performed outside the debating chamber (Latta, 2016). Similar ideas were expressed in an overview of the New Zealand parliament in a prominent textbook on New Zealand politics: "the modern New Zealand parliament rarely lives up to its ideal of constituting the great debate of the nation", instead, it is a "platform for the continuing, frequently rhetorical, battle of political parties" (K. Jackson, 2006, p. 172). It is these debates between political parties that I am interested in.

(Bayley, 2004a, p. 12). The requirement to debate pieces of legislation requires that governments verbally justify what they are doing and consequently expose their justifications to a public process of critique.⁶² Beyond the law-making function of parliament, processes of debate and questioning are integral to the way the parliament as a whole functions to hold government to account for their actions and spending (J. E. Martin, 2015, p. 146). There is much to learn about parliament and about the people, parties, arguments and ideas that inhabit it by studying the record of debates between MPs. In terms of this study, within the records of parliamentary proceedings are many examples of MPs from different parties debating matters in parliament and using the word *economy* during these debates. Studying these examples provides the opportunity to understand the rhetoric of political parties related to the economy.

5.2.2 Considerations when studying parliamentary debates

In this section, drawing on research on parliamentary discourse, I examine potential issues with studying parliamentary debates, including issues related to use of the officially-produced transcripts of these debates known as the *New Zealand Parliamentary Debates* or *Hansard*. I anticipate some potential objections with using the parliamentary debates for this research. I suggest that while there are limitations and peculiarities of parliamentary speech, these can be viewed as part of their usefulness for the study of political arguments.

I must emphasise that I am not suggesting that lay people are influenced directly by parliamentary discourse. Of course, it is unlikely that specific speeches in parliament will be witnessed or heard or read by many people at all. However, although it is unlikely that specific speeches in parliament will be heard by many people, this is not to say that speakers are not oriented to an audience outside the immediate setting of parliament (van Dijk, 2004, p. 360; Ilie, 2015, 2016). Speakers in parliament are aware that their speeches are broadcast live to the public and that there is a written and audio-visual record of proceedings, and therefore the possibility of anything they say in parliament being communicated beyond those witnessing the actual proceedings. It is routine for

⁶² The New Zealand courts view the official records of these debates as a legitimate source for interpreting legislation and one text claims they are “much used in the interpretive process” (Greville, Davidson, & Scragg, 2007, p. 57).

excerpts of parliament's proceedings to be reported on or reproduced through the media. Because of this, even if there are stylistic differences related to parliamentary discourse as a genre (e.g. the use of honorifics as highlighted by Slembrouck, 1992) it is likely that parliamentary debates are similar to other genres of political rhetoric in terms of the specific points of controversy, the kinds of justifications and critiques applied, expectations about the reasonableness of these arguments, and the appeal to beliefs that speakers expect to be taken for granted in the political community. It is this orientation to the audience outside parliament that makes it useful in this respect.

Furthermore, I am not saying that parliamentary discourse represents all political discourse. There is an extra-parliamentary politics that is necessarily not represented in parliament. However, what goes on inside parliament does have something to do with what goes on outside it. It should not be lost that parliamentarians embody their own "representative"-ness, because large numbers of citizens vote to elect them as representatives in their national assembly. I am suggesting that political rhetoric associated with elected representatives of parliamentary parties is relevant to understanding a prominent context for lay people's thinking and to understand an explicitly political way of thinking about the economy and its relevance to lay people's thinking.

Another hesitation regarding the use of the parliamentary record is that parliamentary discourse is the "most formal and institutionalised variety" of political language (Bayley, 2004a, p. 1) and is both "ritualised and rule-bound" (p. 14). There are rules in the New Zealand parliament, for instance, regarding who can speak (for example, opportunities for a political parties' members to speak are related to the proportions each party has in the house, see: McGee, 2005, pp. 181, 549), when and for how long they can speak (McGee, 2005, pp. 177-178). There are also rules about what speakers can say (for example, ensuring speeches are relevant, see: McGee, 2005, p. 185), how they should say it (for example, how they should address other members of parliament, see: McGee, 2005, p. 183), and what is "unparliamentary" (for discussion of practices in New Zealand's parliament, see: McGee, 2005, pp. 187-190). The rules of the institution mediate and control direct interaction and the interpretation of direct interaction. In the New Zealand parliament, according to the rules, MPs are not deemed to be speaking directly to each other and so each MP delivers their speech as if directed to the

Speaker of the House as mediator and moderator of proceedings (McGee, 2005, p. 183). That parliamentary interactions are shaped by its institutional nature is not to say that other settings for political speech are not constrained or rule-bound.⁶³ Other forums for political debate (including election debates, interviews for news, press conferences, and speeches to public meetings) also involve constraints on speakers and their interactions.

These constraints on speaking are useful for purposes of analysis. Because speaking opportunities are controlled, in the parlance of ECON101 speaking time represents a “scarce resource” that party representatives must use effectively for professional and party goals of the speakers and therefore there is some intentionality in what is said in relation to these goals in terms of calculation, planning and possibly scripting.⁶⁴ Furthermore, because there are rules about speech in parliament, these speeches are comparable. In comparison to other kinds of ideological texts that political scientists sometimes use in their research, for example election manifestos, the data is relatively continuous and comparable across time and between speakers. Therefore, many examples of the specific language features of interest, in this case use of the word *economy*, can be collected, compared, and analysed across time.

A further implication of the institutional nature of parliamentary debates are institutional processes (and requirements) to record the proceedings and preserve this as a record for the public and for the representatives themselves. National parliaments are increasingly making parliamentary records accessible to the public in a digital form on the web (along with archives of video recordings). Using publicly available digitised transcripts, it is possible to assemble a large corpus of political speeches. It should be noted at this point that the official transcripts of parliamentary proceedings, although sometimes referred to as a “verbatim” record, are transcribed according to the conventions of

⁶³ In fact, while speech in parliament is rule-bound, speakers in parliament are not subject to a legal restriction prohibiting defamatory speech that applies to settings outside parliament (McGee, 2005, p. 187).

⁶⁴ Parliamentary speech typically involves the delivery of speeches that are pre-written. If the hope is to understand the thinking of lay people, again this may appear problematic, especially as situations where lay people do economy-talk is unlikely to be as planned. However, that parliamentary speech is not all spontaneous does not preclude its relevance as a way to understand the context of political debate or to exemplify features of political rhetoric related to the economy. Furthermore, there are utterances in parliament that are spontaneous, including government responses to supplementary questions in question time or interjections and responses to interjections.

the institution and not practices typical of linguists and other social scientists when they transcribe spoken utterances (Slembrouck, 1992; Mollin, 2007). Speech in parliament is transcribed and edited according to conventions and technologies that have changed over time and the record of proceedings is made available in a public, written form depicting an orderly sequence of utterances and procedural notes. Although there are issues with the accuracy of transcripts and whether accuracy can be captured in any transcript (Ochs, 1979; Cook, 1995), the kinds of deviations that have been identified, for example, “filtering out of ‘disfluency’ and other obvious properties of spokenness” as part of a general process of editing for “writtenness” (Slembrouck, 1992, p. 104),⁶⁵ are not especially relevant if it is ideological accuracy of transcriptions that is required in this study.⁶⁶ As is evident from references to the word *Hansard* in the parliamentary record, MPs are collectively concerned with the record for the public and for posterity. Furthermore, MPs are individually involved in producing the written record by “correcting” their own speeches.⁶⁷ Therefore, the record of parliamentary proceedings should be understood as a text in its own right, one that is intended by speakers, those recording it and those editing to it to transcend the moment of specific utterances in parliament. It is important that we understand that this is a study of the parliamentary record itself rather than a direct study of speech in parliament and this informs the claims that can be made about the analysis.

⁶⁵ The record is a written representation of what was spoken, but as mentioned, speeches themselves are often written and then spoken.

⁶⁶ For example, the parliamentary record does not record every *um*, but when it does it is when speakers are making conscious reference to it (for example, to imitate the speech of another person). This is unlikely to matter much in relation to the aim of this research. However, if mentions of *economy* and the surrounding text were very different to the words uttered this would be important. This was tested anecdotally in the early stages of research as I worked between official transcripts and the videos of speeches. Furthermore, in the course of testing speech recognition software for Chapter 6. I used the official transcripts to see if the software could detect all instances of *economy* in a specific session. This was interesting in two respects, this indicated that transcribed instances of *economy* reflected their actual verified use in parliament, but this also provided an example of *economy* in a short section of text that was not transcribed for that session. This was not included because the speaker had gone over time, however when they began their speech in the next session they used the same words and it was included in the transcript of that session.

⁶⁷ A guide for MPs produced by the Office of the Clerk of the House of Representatives (2014, p. 53) under the heading “You can request minor corrections but cannot change the substance of your speech” states: “A draft transcript of your speech is emailed to you within two-and-a-half hours of your speaking in the House. You can make changes to the draft to correct inadvertent errors or errors of transcription, and to supply text that is missing. You cannot make corrections that change the meaning or tone of the words spoken. Email the corrected version [...] within 6 hours of receiving the draft transcript.”

Contrary to the ideal that parliamentary speech does not involve direct dialogue between MPs,⁶⁸ parliamentary speech is dialogical. Bayley (2004a, p. 24) points out that “[p]arliamentary discourse is composed of a sequence of monologues which are intertextually and contratextually interwoven” and further that “the nature of the discourse is not monologic but dialogic” (p. 25). This dialogicality is grounded in the argumentative nature of parliamentary speech. Importantly for this analysis, the New Zealand parliament like others in the Westminster tradition features representatives arguing “*pro et contra*” or for and against different propositions (Palonen, 2008). This is important for analysis because parliamentary debates make disagreement explicit, with clear and identifiable positions taken by speakers and parties (for example, whether they are for or against the progress of a piece of legislation) and speakers required to justify their stance and criticise the stances of speakers from other parties. Specifically, for this study of political rhetoric related to the economy, utterances using the word *economy* should be understood as fundamentally argumentative in nature, with explicit rhetorical and dialogical qualities of utterances available for closer analysis.

5.2.3 The three political parties to be analysed

Table 5.1 Number of MPs for Labour, National and Greens at beginning of 47th-51st Parliaments⁶⁹

Parliament	Elected	Total MPs	Labour MPs	National MPs	Green MPs	
47th	2002	120	52 (43.3%)	27 (22.5%)	9 (7.5%)	Labour-led Government
48th	2005	121	50 (41.3%)	48 (39.7%)	6 (5.0%)	
49th	2008	122	43 (35.2%)	58 (47.5%)	9 (7.4%)	National Government
50th	2011	121	34 (28.1%)	59 (48.8%)	14 (11.6%)	
51st	2014	121	32 (26.4%)	60 (49.6%)	14 (11.6%)	

It is often contended that people who speak in New Zealand’s parliament are elected to represent “the views of the populace” (McGee, 2005, p. 4). However, the people speaking in parliament are in

⁶⁸ Remembering the ideal that utterances are to be interpreted as if directed to the Speaker of the House there are still aspects of debate that approach direct dialogue. The class of debates that bear closest resemblance to dialogue is parliamentary question time, which involves questions to ministers and a requirement that they answer. The parliamentary record also preserves interruptions where the speaker responds to the interruption in some way.

⁶⁹ The data from this table was collated from the official Electoral Commission New Zealand results website (Electoral Commission New Zealand, 2017). Note that the total number of MPs in parliament varies between terms. The percentages listed are the proportion of seats out of the total number of seats for that parliamentary term.

practice elected as members of political parties⁷⁰ and they represent these parties when they speak (K. Jackson, 2006, p. 164).⁷¹ In the study described in this chapter I have concentrated on the utterances of representatives from three political parties: Labour, National and the Greens. Table 5.1 summarises the number of MPs for these party from the 47th to 51st parliaments. In this section I will justify the inclusion of these parties as well as providing some relevant background.

The inclusion of the Labour and National parties is reasonably straightforward given they are the oldest, most popular, visible and powerful political parties in the New Zealand parliament. The history of the relationship between Labour and National is one of opposition and competition and they should be understood as defining themselves in contrast to each other.⁷² The ongoing debates between the parties have defined the ideological “centre” of New Zealand politics between the “social democracy” of Labour (Aimer, 2015, p. 208) and the “liberal-conservative” orientation of the National Party (James, 2015, p. 221). For a sixty year period under the simple plurality electoral system (First Past the Post or FPP), National and Labour almost exclusively dominated the legislature and one or other of these parties controlled the executive. They have continued to lead governments since the first election under the Mixed-Member Proportional (MMP) electoral system in 1996, and therefore have retained significant influence over policy and overall government direction, as well as setting the agenda for public political debate. Despite the multi-party environment that has existed since MMP’s introduction, television debates during the election campaign have typically featured head-to-head debates including only the major party leaders with the recognition that one or other of these parties’ leaders will be the next prime minister. In the MMP-era Labour or National have

⁷⁰ There have been MPs who are independent, but in recent years they have typically been “between parties”, leaving or being expelled from a political party and eventually joining or forming another political party before they go on to contest the next election.

⁷¹ There is the possibility of conflict between the various roles of speakers in parliament, as representatives of electorates, parties, other constituencies, and, as members of a national legislature, the nation.

⁷² The Labour Party, the oldest party in the New Zealand parliament, formed in 1916 “as the political wing of the industrial labour movement” (Aimer, 2015, p. 207). The National Party formed two decades later in 1936 from the United and Reform parties (James, 2015, p. 218) as a response to Labour’s increasing electoral popularity during the depression years (Aimer, 2015, p. 210). From a rhetorical perspective, the act of voting for one or other major party was traditionally under the two-party system encouraged by the First Past the Post electoral system also a vote *against* the other.

continued to fill the prime ministerial role and the key economic policy portfolio of finance minister.⁷³ As Table 5.1 shows, the Labour Party was in government in the 47th and 48th parliaments and National in the 49th, 50th and 51st parliaments. Because Labour and National represent the largest pool of MPs in my data-set and because parties with more members in parliament have more opportunities to speak, their utterances combined accounts for 71% of tokens in the corpus.

In addition to Labour and National I am also including the Green Party in the analysis. The Greens represent people and ideas marginalised from parliamentary politics prior to the MMP-era despite a long history of green party politics in New Zealand (Ford, 2015).⁷⁴ The Greens have been successful in achieving continuous representation in parliament since the first MMP election in 1996⁷⁵ and in the 2008, 2011 and 2014 the Greens were the third highest polling party and consequently the third largest party in parliament. Table 5.1 shows the number of Green MPs for each of the parliamentary terms relevant for this study. The primary reason for including the Greens is not their achievement as a party though, but rather the ideological space they have traditionally inhabited that is grounded in opposition to economic ideas shared by the major parties.⁷⁶ Although the Greens supported Labour-led minority governments on confidence and supply in the 47th and 48th parliament there are significant differences between the Greens and both major parties on their economic ideas. As I have discussed in Ford (2015), evident in the Greens' founding Charter, is a critical view of dominant assumptions about economic growth and progress. The ecological and social ideas of the Greens are underpinned by the rejection of the possibility of "unlimited material growth" (Green

⁷³ The only exception to this was in 1996 when the New Zealand First party leader, Winston Peters, filled a specially created Treasurer role that was senior to the Finance Minister.

⁷⁴ Before the MMP-era, the Greens and the Values Party, their organisational and ideological predecessor, failed to gain representation in parliament despite at times achieving significant electoral support. Values formed in 1972 and they are significant in the history of green politics internationally, as the first example of a green party contesting a national election. Values contested elections from 1972 to 1987 and more than one in twenty voters voted for Values in 1975. The Green Party of Aotearoa New Zealand formed in 1990 and contested the 1990 election and again more than one in twenty voters voted for the Greens in 1990. Almost one in five voters voted for the Alliance, a coalition of minor parties that included the Greens, in 1993.

⁷⁵ The three Green party members elected in 1996 were part of a coalition of minor parties, the Alliance. The Greens left to contest the 1999 general election on their own and there have been Green party MPs since 1999.

⁷⁶ While Values and the Greens formed in opposition to the ideological consensus of the major parties, former MPs from the National and Labour parties were instrumental in forming the other minor parties currently in Parliament (including New Zealand First, United Future, ACT, and the Māori Party). There are differences between the ideas the parties represent, however ideologically NZ First, United Future and ACT are neighbours of the major parties, while the Greens (and the Māori Party) potentially inhabit different neighbourhoods.

Party of Aotearoa New Zealand, 2014). Indeed, for the Greens it is economic growth based on the overuse of natural resources that drives “unsustainable climate change, environmental degradation, growing social inequality and poverty” (Ford, 2015, p. 233). While Labour and National have disagreed over whether or how to redistribute the benefits of economic growth, both Labour and National have historically shared the assumptions that economic growth is necessary and indeed good for the nation (pp. 232-233). The Greens critical view of the economic ideas of the two major parties⁷⁷ makes them interesting as a counter example for analysis.

5.3 Method

The corpus-assisted approach to studying discourse is typified by analytic movement between quantitative and qualitative analysis of the corpus and emphasises comparisons to determine differences and similarities (Partington et al., 2013, pp. 10-14). The intention of this approach is to reveal and understand “non-obvious” patterns of use (p. 11). In the case of this research, I am seeking to understand patterns of use of the word *economy* by investigating patterns of use by representatives of different political parties and to determine what this reveals about common features of rhetoric related to the economy. A corpus-assisted approach to researching discourse should be thought of as “exploratory”, “highly data-driven and serendipitous” (Partington, 2009, p. 289) because it takes seriously the possibility that discoveries during analysis will raise new questions that can inform subsequent analysis. This is the approach taken in this study. From the previous chapters (and particularly the historical background and criticisms of use of *the economy*) I have some specific expectations about patterns that can be examined in actual use (for example, the expectation that *economy* and *growth* will be related for speakers from the major parties), but the key potential of corpus methods is that they allow us to go beyond these specific expectations to identify and explore features that emerge from studying how speakers actually use *economy*. In addition, corpus-assisted studies often involve the use of “specialised corpora” which are built by researchers to allow them to

⁷⁷ As with many accounts to capture what parties are for, to understand the ideas of political parties requires an understanding of what is being opposed. This is perhaps a problem with attempts to place parties on ideological spectrums (of however many dimensions). The very existence of Values and the Greens demonstrates that the founders of these parties believed that their ideas and agenda could not be effectively pursued by joining Labour or National.

study a specific type of discourse (Partington et al., 2013, p. 12). In this case, it was a large corpus based on the *New Zealand Parliamentary Debates*. The next sections will describe the corpus and the associated software that I developed in the course of this research.

5.3.1 The New Zealand Parliamentary Language Corpus (NZPLC): an annotated corpus of *New Zealand Parliamentary Debates*

To study political rhetoric related to the economy I built a large corpus based on the *New Zealand Parliamentary Debates*. The *New Zealand Parliamentary Language Corpus* (NZPLC; Ford, 2016) contains more than 57 million “words” recorded as spoken in parliament.⁷⁸ As well as providing a way to study usage of *economy* in the New Zealand parliament, this data can provide the basis for other kinds of research in political science, linguistics and other areas and I consider this is a key contribution of the overall project (this is discussed more in Chapter 7). The data is available for researchers in the Political Science and Linguistics Departments at the University of Canterbury and the ultimate goal is to make the data-set public on the web for researchers and the public.

To build the corpus I wrote software that crawled, downloaded and processed the official records of parliament available on the parliament.nz website. The process I took to build the corpus and associated software is described in more detail in Appendix A: Building the New Zealand Parliamentary Language Corpus (NZPLC). The online records consisted of debates featuring interactions between speakers one after the other in an HTML page. These debates had to be processed to identify each separate utterance, and then to store each utterance in a database annotated with additional linguistic and non-linguistic data that could be utilised in the analysis. Most importantly for the analysis presented here, each utterance was coded with each speaker’s political party and the date of the utterance and this allowed comparisons between the rhetoric of representatives of political parties as well as comparisons between different parliamentary terms. The sequence of utterances was also retained so that the utterance could be read in its context within the overall debate. I wrote a corpus browser and analysis tool that allows the user to efficiently search for

⁷⁸ Here I am using “word” very loosely to indicate the total number of non-punctuation tokens in the corpus (57,782,378). This count depends on how the text is tokenised (and this is described in section 5.3.2). In total there are 64,263,939 tokens (i.e. more than 64 million tokens), which includes 6,481,561 punctuation tokens. There are 117,082 distinct tokens used.

and compare the usage of words or phrases of interest and navigate between various kinds of quantitative analysis, concordances, specific utterances, and the utterances in the context of debate.

The corpus is based on the full record of parliamentary debates between February in 2003 and the end of March 2016.⁷⁹ The start date was less a choice than making use of all available web-accessible data, as this is when the online version of the parliamentary proceedings began at the time the corpus was built. The choice of March 2016 to end the corpus was intended to coincide with the end of the time period data was collected for in the study described in chapter six. The time period spans five parliamentary terms from the 47th to 51st parliaments separated by four elections (in 2005, 2008, 2011 and 2014). It must be noted that the 47th and 51st parliaments are partial terms and this is accounted for in the analysis when comparing terms.⁸⁰ There are 396,525 utterances contained in the corpus and these are annotated with the date of the utterance, the person speaking⁸¹ and attributes of the speaker, most notably their political party.⁸² In addition, each utterance was classified in several subcorpora for the purposes of comparison (for example, “Female Speakers”, “Question Time”, “Green Party” or “Green Party 49th Parliament”). In addition to the spoken utterances, there are 39,103 procedural entries that are primarily comments describing aspects of proceedings (for example, indicating when a vote was taken and what the results were) and these do not directly report speech, although these may reflect unreported utterances (for example, “Prayers”).

⁷⁹ The first utterance in the corpus is dated 11 February, 2003 and the last utterance is dated 31 March, 2016.

⁸⁰ The 47th parliament first sat in August 2002 (following an election in July 2002) and the 51st parliament sat for the last time in August 2017 (prior to an election in September 2017). When I mention the 47th and 51st parliamentary terms it should be clear from this point that this only concerns the data in the corpus for these terms. To account for this in analysis I use normalised frequencies (i.e. the frequency per thousand or million tokens) and effect size measures for collocation and keyness that are comparable across subcorpora of varying sizes.

⁸¹ The speaker code either represents one of 259 distinct MPs or a separate generic code where the speaker is not identified due to their role (for example, titles for the Speaker of the House) or where they are not directly identified in the parliamentary record (e.g. “Hon Member” or “Government Members”). It should be noted that only utterances by specific named people, speaking as representatives of a political party, were included in analysis based on political parties. This means that Speaker of the House was not included.

⁸² This is not done for the generic speaker category, as these utterances primarily relate to the Speaker of the House, who although they are elected as a representative of a political party are considered independent of this party identification when acting as arbitrator of proceedings in the debating chamber.

5.3.2 Introducing the analytic procedure, key terms and technicalities of analysis

There were three core stages of analysis. The first stage involved preliminary analysis of the use of *economy* based on frequencies of use to understand if *economy* was associated with specific people, situations, political parties, and time periods (see Section 5.4). The second stage examined regularities related to the content of what was being said in relation to the word *economy* (see Section 5.5). This analysis identified persuasive assumptions (see Section 5.5.1) that were also confirmed by subsequent analysis. The third stage of analysis, still concentrating on the content of parliamentary rhetoric related to the economy, attended to changing use of *economy* by political parties over time and introduced a new analytic technique I refer to here as *key collocates analysis* (see Section 5.5.2).

This analysis reported in the following sections uses specialist terms related to corpus methods and statistical measures that require further discussion, both in what they mean and any related technicalities. It should be noted that the terms corpus, concordance, collocation, keyword and keyness were introduced in Section 4.3.1. There are four broad groupings of terms and technicalities to address. Firstly, the analysis is based on *tokens*. The utterances in the corpus were tokenised using an automated process (see Appendix A) that splits the text of an utterance into individual tokens that typically align with words or punctuation. The main, perhaps non-intuitive, exception to this are contractions (i.e. *don't* is tokenised as two separate tokens *do* and *n't*). Analytic procedures and statistical operations are based on these tokens or sequences of these tokens (i.e. an n-gram).

The second set of terms and technicalities to address are related to the collocation measure being used. As Baker (2010, pp. 24-25) discusses, there are different ways that corpus linguists measure the tendency for words to co-occur. He discusses the *Dice coefficient* as a statistic that “reveals more frequent lexical collocates” (p. 25). The collocation measure used in this analysis is *logDice* (Rychlý, 2008), which is derived from the *Dice* coefficient. The *logDice* statistic is an effect size measure that is independent of the size of the corpus and allows comparisons between corpora. Baker (2010, p. 24) discusses choices related to the collocation span. The analysis reported here is based on tokens collocated with *economy* within the same sentence. The intention of this was to find

patterns of use beyond idiomatic forms, but also within the boundaries defined by a sentence. It should also be noted that the collocation calculations ignore duplications, which means if there were two instances of *economy* in a sentence the co-occurring words are not double-counted in collocation results. Collocations are represented in this chapter as *economy+collocate*.

The third set of terms and technicalities relates to the keyness analysis. To compare usage between subcorpora of different sizes comparing raw word counts is problematic (e.g. 10 instances of use in a subcorpus of 234,567 tokens does not equate to 9 instances of use in a corpus of 9,876 tokens). The key comparison metric is *normalised frequency*, which expresses average frequency of use per thousand or million tokens. The common base allows intuitive comparisons. *Relative frequency ratio* and *Log ratio* are effect-size measures of keyness. The choice of these measures is influenced by recent discussion by Andrew Hardie (2014b, 2014a) who advocates the primary use of effect-size measures in concert with *Log-Likelihood* as a secondary indicator of the amount of evidence for a claim of difference (for more on the problems of significance testing on corpora, see: Kilgariff, 2005).

Fourthly, the development of key collocates analysis is discussed in detail in Section 5.5.2. This combines the measures of collocation and keyness already discussed and is intended to capture changes within the collocation span between, in this case, time periods. The analysis was performed on the top 200 collocates for each political party based on the logDice measure.

It should be noted that the various statistics discussed were implemented in the software tool I developed for analysis, which is discussed in Appendix A: Building the New Zealand Parliamentary Language Corpus (NZPLC). These were tested against online tools and downloadable spreadsheets made available by Paul Rayson (2018) and verified against other software tools (Hardie, 2012; Brezina, McEnery, & Wattam, 2015).

It should also be noted that where I reference specific extracts from speeches contained in the NZPLC, I will reference the corpus rather than the *New Zealand Parliamentary Debates* itself. The format for this is the name of the speaker, their political party (NAT, LAB, GRN), the debate title, the

date, and then the id of the utterance in the NZPLC (e.g. *John Key, NAT, Debate on Prime Minister's Statement, February 9th, 2010, NZPLC#281904*). Specific quotes could easily be found in the online parliamentary debates using this information.

5.4 Preliminary analysis based on frequencies of use

Before discussing how representatives of political parties use the word *economy* in parliamentary debates, I sought to understand more general patterns and variation in terms of the frequency with which *economy* was used. I was particularly interested in how commonly it was used by speakers in parliament. It was also anticipated that additional questions would emerge from this analysis. In total there were 26,615 mentions of *economy* and on average across the corpus *economy* was used 0.414 times per 1000 tokens.⁸³

5.4.1 Variation in *economy*-talk between speakers and situations

There is considerable variance between speakers in their frequency of use of the word *economy*. Considering only the 185 speakers with more than 100,000 tokens in the corpus for a moment, 63 of these speakers mentioned *economy* more than the average across the entire corpus of 0.414 times per 1000 tokens and 122 mentioned it less frequently than this on average. Seventeen of these speakers mentioned *economy* at least once on average per one thousand tokens and, in contrast, twenty eight speakers mentioned the word *economy* less than a tenth as often on average (i.e. less once every ten thousand tokens or 0.1 times per 1000 tokens). To illustrate the variance in speakers usage further Table 5.2 shows the top ten and bottom ten speakers by normalised frequency for those speakers represented by at 100,000 tokens in the corpus. Of the ten MPs that used *economy* most frequently in relative terms, six of these were members of the National Party, three were Green Party members, and

⁸³ That *economy* was used 0.414 times on average per 1000 tokens confirms what I suggested in Chapter 4 (see Section 4.5), which is that the word *economy* is a common feature of parliamentary debates. In the WSC sample of parliamentary speech it was used 0.333 times per 1000 tokens. The 26,615 mentions were spread across 14,599 separate utterances, which represents 3.7% of all utterances in the corpus. There is variation across these utterances in how frequently it was used (64.3% of utterances only mentioned *economy* once, 17.9% twice and 17.8% three or more times) and in the length of these utterances, the longest being speeches related to the annual budget presented to parliament by the Minister of Finance and the shortest being interjections (for example, in response to a claim about the success of government action an opposition MP interjected with "The economy did it").

one Labour MP. Of the top twenty (not shown in the table), three quarters were members of the National Party. Those least likely to use *economy* include members of minor parties as well as National and Labour party members. This demonstrates two things: there appears to be differences between parties in how often they use *economy*, which is a focus of subsequent analysis in Section 5.4.2, and there appears to be differences between members of the same party. Differences between members of the same party are likely to be related to role. Of the three political parties that were analysed (Labour, National and the Greens) party leaders and members in ministerial or spokesperson roles related to finance or economic development were more likely to say *economy* than the majority of speakers from their parties.⁸⁴

Table 5.2 Highest and lowest ranked speakers by normalised frequency for *economy* with at least 100,000 tokens in the NZPLC

Usage	Rank	Name	Party	Gender	Normalised frequency (per 1000 tokens)	Mentions of <i>economy</i>	Total tokens
High	1	Paul Goldsmith	National	Male	2.206	333	150,944
High	2	Bill English	National	Male	2.013	2480	1,231,843
High	3	Julie Anne Genter	Green	Female	1.661	279	168,003
High	4	Steven Joyce	National	Male	1.534	731	476,677
High	5	Russel Norman	Green	Male	1.49	711	477,314
High	6	David Clark	Labour	Male	1.386	543	391,904
High	7	Gareth Hughes	Green	Male	1.343	452	336,455
High	8	David Bennett	National	Male	1.294	542	418,804
High	9	John Hayes	National	Male	1.279	241	188,458
High	10	Cam Calder	National	Male	1.143	138	120,738
	...						
Low	176	Judy Turner	United	Female	0.055	13	237,863
Low	177	Ron Mark	NZ First	Male	0.051	25	494,702
Low	178	Lynda Scott	National	Female	0.049	6	121,912
Low	179	Pita Paraone	NZ First	Male	0.046	9	196,808
Low	180	Murray Smith	United	Male	0.043	7	161,549
Low	181	Dail Jones	NZ First	Male	0.042	16	384,031
Low	182	Ross Robertson	Labour	Male	0.04	8	202,414
Low	183	Murray McCully	National	Male	0.022	3	138,979
Low	184	Stephen Franks	ACT	Male	0.018	7	382,575
Low	185	George Hawkins	Labour	Male	0.017	2	119,073

⁸⁴ To fully investigate the effect of role it would be necessary to restrict the utterances for each speaker to the instances they were undertaking that role (or at least the time period that they held that role). There are further aspects of role that may be influencing variation between speakers, for example members who were prominent in debating procedural matters in parliament are less likely to use *economy*.

Gender is another source of variation with males tending to mention *economy* more than females. On average across the entire corpus, male speakers mentioned *economy* 1.58 times more than female speakers. As Table 5.3 shows, for National, Labour and Green Party MPs, male MPs were more likely to mention *economy* than female MPs. That this difference holds within parties indicates that the effect is not explained by usage associated with those parties with fewer or more female MPs. These gender differences are interesting and although beyond the scope of this project they do deserve further research, especially given the findings related to gender from the survey research mentioned in Chapter 2 that indicated that males were more like economists in their knowledge and attitudes.⁸⁵ There are individual exceptions to this pattern, for example Green MP Julie Anne Genter is featured third in Table 5.2 and her background in transport economics indicate that academic and professional characteristics of speakers are likely to be additional factors related to individual variation in usage.

Table 5.3 Comparison of normalised frequencies of *economy* for female and male MPs

	Normalised Frequencies (per 1000 tokens)		Relative Frequency Ratio	Log Ratio
	Female MPs	Male MPs		
All MPs	0.299	0.471	1.58	0.66
National Party MPs	0.389	0.642	1.65	0.72
Labour MPs	0.247	0.393	1.59	0.67
Green MPs	0.384	0.707	1.84	0.88

In addition to variations that are related to characteristic of the speakers, there is variation between different kinds of debates. Utterances related to parliamentary question time were identified and annotated while building the corpus and so it was possible to compare parliamentary question time with other kinds of speeches. The use of *economy* was more characteristic of question time (0.520 times per 1000 tokens) than other business of the house (0.394 times per 1000 tokens), being

⁸⁵ Comparing all male and all female MPs there are a distinct set of words that are over-represented for female MPs (*children, families, social, child, care, parents, women, youth*) and others that are over-represented for male MPs (*tax, finance, bank, capital, foreign*). Similar differences are revealed when restricting the analysis to male and female MPs from the same political party. No analysis of change over time was conducted. This deserves further research especially given the increase in female MPs since MMP was introduced. That there are differences is likely to be related to the ministerial and spokesperson roles traditionally offered to males and females by their political parties (for example, there has only been one female Minister of Finance in New Zealand) and it appears that this difference mirrors more pervasive gender roles and relations in wider society.

used 1.3 times more often in relative terms (Log Ratio 0.401, Log-likelihood 316.1).⁸⁶ Question time provides opposition parties the opportunity to directly scrutinise the government by allowing them to address questions directly to government ministers. Members of the governing party or parties are also able to ask questions, although these are typically designed to allow government ministers to emphasise perceived achievements of the government. It is interesting that the use of *economy* is over-represented in speech situations that are more directly conflictual and overtly dialogical suggesting that the *economy* is important in criticising and justifying the government and their record.

Recognising this variation between individual speakers in parliament or other variations discussed is important, but it is not the purpose of the present chapter. However, there is an important implication of recognising the variation between speakers. For the analysis in the rest of this chapter that focuses on the use of *economy* by political parties, this variation implies that when we aggregate and analyse at the level of parties that there is variation between representatives of each party and that patterns of use may reflect the speech of a more limited set of speakers. The concordance reports generated by the NZPLC software displays the name of the person associated with the utterance, and so this is another reason to ensure that quantitative analysis is backed up with concordancing allowing checks on whether patterns of usage are associated with one or multiple party members. While recognising this variation, parties do plan speaking and coordinate who speaks and it may be only a handful of people who are tasked with doing the *economy*-talk for their party. That party leaders and important ministers and spokespeople, who are prominent public representatives outside parliament and more likely to have their utterances in parliament broadcast in the media, tend to talk *economy* frequently indicates its importance for the ideological struggles of parliamentary parties.

⁸⁶ This difference would most likely be more pronounced if those utterances arguing about procedure, a common occurrence in question time, were removed. For example, comparing normalised frequencies of *Point of Order*, which is a phrase used in debates related to the rules and procedures of parliament, reveals that it was almost 7 times more likely to occur in question time than in other parliamentary debates.

5.4.2 Variation between political parties and over time: identifying a key point of change in 2008

Table 5.4 Normalised frequencies of *economy* by political party

	Normalised Frequency (per 1000 tokens)
All MPs	0.414
Labour MPs	0.345
National MPs	0.584
Green MPs	0.542

The analysis of individual speaker variation revealed that members from the National Party were among the MPs who used *economy* in parliament the most on average. This suggests differences between parties in their frequency of use and further evidence to support this claim is provided in Table 5.4. Over the period covered by the entire corpus National and Green Party MPs used *economy* at least 1.5 times more frequently than Labour on average.⁸⁷ Again, it is important to remember that there is variation between speakers within these parties, but the quantitative analysis allows us to identify differences related to how party representatives are collectively using speaking opportunities in parliament.

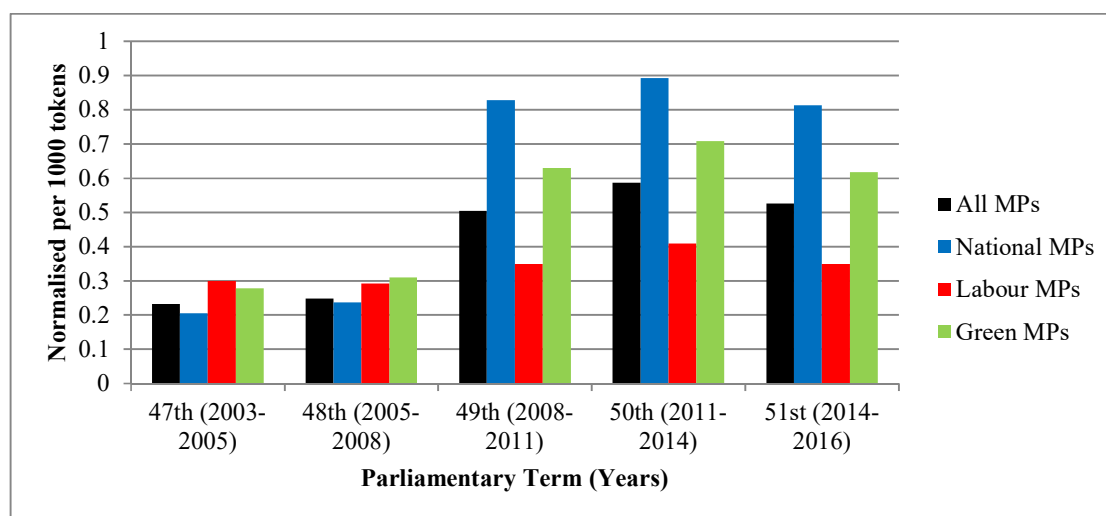


Figure 5.1 Mentions of *economy* in the New Zealand Parliament 2003-2016

⁸⁷ Other than one minor party whose two members' utterances only account for 0.5% of the tokens in the corpus (the Progressives), speakers from the other parties represented in the corpus mention *economy* less per 1000 tokens than National, Labour and Green MPs.

As well as these differences between speakers there are differences in the frequency with which *economy* was used over time. Figure 5.1 represents normalised frequencies of mentions across the five parliamentary terms in the corpus. It draws attention to the crucial period from 2008 when use of *economy* increased markedly for members of the New Zealand parliament. Overall mentions of the word *economy* doubled from the 48th to 49th Parliaments and the normalised frequencies for the 49th, 50th and 51st parliamentary terms were double those for the 47th and 48th parliaments. The main trend for all MPs is mirrored by the major parties: a large increase in the 49th parliament followed by a smaller increase in the 50th parliament and then a small decrease in the 51st parliament.

Given the overall differences between the parties already described, examining variations in the use of *economy* by the parties over this time period is both interesting and revealing. Labour Party members demonstrated only a marginal increase, 1.2 times the normalised frequency of the 48th parliament. In contrast to Labour's minor increase, the increase for National and the Greens was much more noticeable. National Party representatives' mentions of *economy* in the 49th parliament were 3.5 times the normalised frequencies in the 48th parliament. Green Party representatives doubled their use of *economy* on average between the 48th and 49th parliaments. The small increase by Labour and the large increase by National and the Greens signifies a divergence in the frequency of use from this point. Under the Labour-led Government during the 47th and 48th parliamentary terms there was not a substantial difference between the normalised frequencies of the Greens and Labour. While in opposition though (prior to the 49th parliament), the National party MPs mentioned *economy* less than Labour and the Greens. However, from the 49th parliament National MPs have tended to use *economy* at least twice as much as Labour MPs and Green MPs have used *economy* much more than Labour MPs (at least 1.7 times the normalised frequency). Comparing normalised frequencies for Labour and National while in Government shows that National while in Government used *economy* almost three times as much as Labour in Government.

Comparing patterns of variation in the normalised frequencies *over time* allows us to quantify a dramatic shift in use of *economy* from 2008 timed with the financial crisis and a change from a period of Labour-led to a period of National governments. However, the significant variation between

parties in this shift indicates that the use of *economy* is more complex than a reaction to a crisis or a new government setting the agenda. The period from the 49th parliament beginning in late 2008 drives the overall patterns of variation described between the Labour and the National and Green representatives in Table 5.4, with National and Green MPs increasing their use of *economy* much more than Labour MPs.⁸⁸ The patterns of variation between the parties suggests that representatives of political parties were prioritising and managing their *economy*-talk in different but related ways. In addition, the large increase by the Greens from the 49th parliament provides evidence to support the claim by Edwards and Lomax (2012), which was that 2008 marked a turning point for the Greens in seeking to draw attention to their economic credibility as a way to increase public support for the party. It suggests that this reorientation to appear economically credible motivated more *economy*-talk by the Greens.

5.5 Analysing the content of parliamentary rhetoric related to the economy

An important implication of the preliminary analysis is that there are obvious changes going on in relation to how parties manage and prioritise their *economy*-talk over time. To develop an understanding of common features of political rhetoric related to the *economy* we must move from patterns of frequency of use to examine patterns reflecting the content of what is being said.

5.5.1 A shared vocabulary, but shared assumptions? Exploring the collocates of *economy*

Using quantification to identify patterns of usage of *economy* in relation to other words is useful to begin understanding the content of rhetoric related to the economy. Collocates of *economy*, or words with a measureable tendency to be used in association with *economy*, are indicative of the packaging of meaning and assumptions in discourse (Baker, 2006, p. 96). Table 5.5 shows the top collocates for the word *economy*. These results provide evidence for some general expectations, for instance that *economy* collocates with words that are likely to be related to economic growth (*growing*, *growth* and

⁸⁸ It should be noted that if the analysis were restricted to the period when Labour was in government the results shown in Table 5.4 would look quite different, which should provoke some caution about generalisations about parties' tendencies to use *economy*.

grow). However, this is just a starting point for analysis because collocates across the entire corpus summarise linguistic action across parties that tend to disagree and say different things. So, for example in the case of economic growth, we might expect differences in usage between the Greens and the two major parties.

Table 5.5 Top 20 Collocates for *economy* in the NZPLC⁸⁹

Entire Corpus Collocation Data (25024)		
Rank	LogDice	Frequency Token
1	10.646	1539 growing
2	10.618	1979 growth
3	10.611	8443 our
4	10.571	1409 grow
5	10.545	1972 jobs
6	10.139	955 productive
7	10.068	7234 zealand
8	9.98	1591 economy
9	9.883	1473 economic
10	9.881	9468 new
11	9.688	702 competitive
12	9.618	1164 sector
13	9.562	713 global
14	9.541	792 strong
15	9.535	3120 more
16	9.461	1150 world
17	9.415	605 recession
18	9.374	1471 tax
19	9.374	839 investment
20	9.355	1475 zealanders

The top collocates of *economy* within the subcorpora for National, Labour and the Greens are displayed in Table 5.6 and these results are revealing. While the degree of strength of collocation differs there are a striking number of the top ranked collocates shared for National and Labour (these are highlighted in the table across the three parties). Fifteen of the top twenty collocates for National and Labour (highlighted in green in Table 5.6) are common to both parties and the first five collocates (with red border in Table 5.6) are identical (although ordered differently).⁹⁰ In contrast, what is

⁸⁹ See Section 5.3.2 for discussion of the way in which collocations were calculated.

⁹⁰ These results provide further insights into the top collocates for the entire corpus displayed in Table 5.5 as these represent collocates common to both National and Labour. There are more utterances by speakers from

striking about the top collocates for the Green party is the extent of their deviations from the shared vocabulary of the major parties. As Table 5.7 indicates, this is most obviously related to the strong associations of use of *economy* for the Greens with words indicating their environmental orientation (*environment*, *sustainable*, *green* and so on) and the much weaker association of *economy* with *grow*, *growth*, *growing* and *strong*.

Table 5.6 Top 20 collocates for *economy* by political party with common collocates highlighted

Rank	National Collocation Data (12072)			Labour Collocation Data (7652)			Greens Collocation Data (2855)		
	LogDice	Frequency	Token	LogDice	Frequency	Token	LogDice	Frequency	Token
1	11.131	1034	growing	10.628	446	grow	11.013	1487	our
2	10.962	1299	growth	10.546	2795	our	10.755	341	environment
3	10.937	1206	jobs	10.301	471	growth	10.668	194	sustainable
4	10.841	832	grow	10.288	568	jobs	10.556	275	economy
5	10.813	3279	our	10.265	367	growing	10.522	150	smart
6	10.583	629	productive	10.004	495	economy	10.387	836	zealand
7	10.446	581	competitive	9.824	1974	zealand	10.202	1057	new
8	10.425	3481	zealand	9.766	434	economic	10.092	133	global
9	10.245	4657	new	9.69	350	plan	10.074	364	green
10	10.073	1768	more	9.62	2643	new	10.003	192	economic
11	9.981	703	economic	9.601	200	productive	9.974	166	sector
12	9.967	492	strong	9.495	573	tax	9.862	121	jobs
13	9.965	442	recession	9.36	222	strong	9.829	133	society
14	9.82	621	world	9.332	174	exports	9.803	106	clean
15	9.794	584	sector	9.222	302	world	9.718	402	more
16	9.787	669	economy	9.192	522	country	9.674	135	climate
17	9.76	3006	government	9.188	236	investment	9.61	150	tax
18	9.755	992	percent	9.13	436	zealanders	9.567	91	carbon
19	9.742	384	global	9.12	278	sector	9.532	71	productive
20	9.701	815	zealanders	9.1	1850	government	9.504	107	oil

At this point I conducted a more in-depth qualitative investigation by examining concordances and examining usage specific utterances and their interactional context. The purpose of this analysis was to determine if the collocates shared by National and Labour in Table 5.6 represented evidence for common features of rhetoric related to the economy. This analysis provided evidence that this shared vocabulary did indicate shared assumptions common to speakers from

National and Labour and so the collocation results for the entire corpus are likely to over-represent the discourse of these parties. Apart from the word *competitive*, which is strongly associated with speakers from the National party, the rest of the top 20 collocates shown in Table 5.5 are among the top 40 collocates for each party. For example, *tax* is 12th for Labour and 35th for National and *more* is 10th for National and 26th for Labour. There are differences in the relative strength of associations, but what I am highlighting here is the degree of shared-ness of a specific set of words for the two major parties.

different political parties with related argumentative appeals. Two of the most important shared assumptions related to *growth* and the nation are discussed in the following two sections.

Table 5.7 Key differences between speakers from the Green party and speakers from National and Labour

Token	Greens (2855)			National (12072)			Labour (7652)		
	Rank	LogDice	Frequency	Rank	LogDice	Frequency	Rank	LogDice	Frequency
environment	2	10.755	341	108	8.774	254	34	8.833	200
sustainable	3	10.668	194	228	8.2	122	33	8.84	129
smart	5	10.522	150	1257	5.832	22	256	7.854	58
green	9	10.074	364	511	7.337	79	891	6.479	26
society	13	9.829	133	614	7.092	66	35	8.825	190
clean	14	9.803	106	1354	5.662	20	831	6.594	26
climate	16	9.674	135	653	7.011	56	564	7.124	42
carbon	18	9.567	91	945	6.4	35	856	6.543	25
oil	20	9.504	107	477	7.449	71	792	6.669	27
...									
growth	26	9.324	73	2	10.962	1299	3	10.301	471
growing	72	8.976	53	1	11.131	1034	5	10.265	367
strong	210	8.364	38	12	9.967	492	13	9.36	222
grow	211	8.361	32	4	10.841	832	1	10.628	446

5.5.1.1 The predominance of *growth*

An important finding from the quantitative analysis shown in Table 5.6 is the very strong association of *economy* with words associated with *grow*, *growth*, and *growing* for speakers from the National and Labour parties. Across the corpus 18.8% of sentences mentioning *economy* also mentioned variants of *grow* (*grow*, *growth*, *growing*, *grew*, *grown*, and *grows*).⁹¹ These associations were much stronger for speakers from the National party, with one in four sentences (25%) mentioning *economy* also mentioning one of these growth-related words, while for speakers from the Labour party this was closer to one in six sentences (16.2%).

The concept of growth was clearly dominant in political rhetoric related to the *economy* across the parliament, but especially for speakers from the two main parties. In terms of its frequency, this is the most common metaphor related to the economy. Further analysis of concordances confirmed that mentions of *grow*, *growing*, and *growth* with *economy* overwhelmingly referred to

⁹¹ As I will discuss below, concordances of these words demonstrate that these are not always related to economic growth, but there are also a number of other growth-related words that are not factored in (e.g. *fastest-growing* or *pro-growth*).

economic growth. To illustrate this, there are a series of tables below displaying a small random sample of concordance lines for National and Labour MPs mentioning *economy* and *grow*, *growing*, and *growth*. As shown in Table 5.8 and Table 5.9, *grow* is frequently a verb with *economy* as object and is frequently used in the form [to] *grow the/our economy*. Similarly, Table 5.10 and Table 5.11 show that *economy* is often either the object of *growing* (e.g. *growing the economy*) or is modified by it in the form [a] *growing economy*. The concordances for *growth* (Table 5.12 and Table 5.13) illustrate less idiomatic usage in relation to *economy*, although the phrases *growth in/of the/our economy* are common. The word *growth* in the context of *economy* is typically used to represent economic growth, often as *growth* or *economic growth* or as part of a multiple-word noun phrase (e.g. *growth rate*, *long-term growth*, *moderate growth*, *X percent growth*).

I will highlight two additional observations of the analysis of use of *grow/growing/growth* with *economy*. Firstly, although growth statistics were commonly mentioned in debates it was not common for speakers to specifically mention the measures they were referring to. Speakers rarely mention *GDP* or *Gross Domestic Product* in the context of *economy*, rather it was the *economy* itself that was *growing* (e.g. *the Reserve Bank forecast our economy to grow at an average of 2.5 percent each year*). Secondly, although growth rates in percentage terms were mentioned, speakers also indicated the degree of growth by comparison with previous or current growth rates or growth rates in other national economies (e.g. *growing faster*, *growing more slowly*, *fastest growing*, *growing faster*, *grow faster*, *grow more*, *more growth*, *stronger growth*) and growing more was better.

Table 5.8 Concordance of National Party MPs mentioning *grow* in context of *economy* (10 random rows)

08/06/11	National	Shane Ardern	First of all , let us look at where we can <i>grow</i> the <i>economy</i> .
15/05/14	National	Bill English	ld momentum , with employment continuing to <i>grow</i> and wages continuing to rise .
17/05/07	National	Judith Collins	looking to the future and saying : `` Let 's try to <i>grow</i> this <i>economy</i> . "
12/02/14	National	Ian McKelvie	nt , is aimed at giving people the opportunity to <i>grow</i> and thrive and giving our <i>economy</i> the opportu
01/08/12	National	Todd McClay	Zealanders , but let us not find a single way to <i>grow</i> the <i>economy</i> , to grow a way for the Governme
22/07/15	National	Kanwaljit Singh	We want our <i>economy</i> to <i>grow</i> , to be productive , and to be internationally con
12/02/14	National	Ian McKelvie	rive and giving our <i>economy</i> the opportunity to <i>grow</i> and thrive .
30/01/13	National	Bill English	and the Reserve Bank forecast our <i>economy</i> to <i>grow</i> at an average of 2.5 percent each year over the
21/08/12	National	Paul Goldsmith	Labour talks about wanting to <i>grow</i> the <i>economy</i> , but when it comes to the crunch
02/08/11	National	David Bennett	he infrastructure of New Zealand so that we can <i>grow</i> the <i>economy</i> .

Table 5.9 Concordance of Labour Party MPs mentioning *grow* in context of *economy* (10 random rows)

19/06/12	Labour	Grant Robertson	So having got no ideas to <i>grow</i> the <i>economy</i> --
28/04/10	Labour	Nanaia Mahuta	Because the Government has no plan to <i>grow</i> the <i>economy</i> and create the jobs that are needed
21/05/15	Labour	David Cunliffe	nationally competitive sectors of the <i>economy</i> to <i>grow</i> . "
29/06/06	Labour	Shane Jones	ad information and communications technology <i>grow</i> and drive efficiency within the <i>economy</i> .
16/05/13	Labour	David Cunliffe	balance and if the Government had a strategy to <i>grow</i> the <i>economy</i> , which it does not , then we would
27/05/10	Labour	Stuart Nash	extra money on investing in businesses that will <i>grow</i> the <i>economy</i> and create jobs .
25/10/12	Labour	Clayton Cosgrove	ent that is required , and we will not prosper and <i>grow</i> as an <i>economy</i> and as a country .
19/05/11	Labour	David Shearer	thing is absent from this Budget , it is a plan to <i>grow</i> the <i>economy</i> .
05/05/10	Labour	David Cunliffe	The Government does not have a plan to <i>grow</i> this <i>economy</i> .
21/05/15	Labour	David Clark	th savings as a pool for investors to call upon to <i>grow</i> new businesses , and that pool of savings is ess

Table 5.10 Concordance of National Party MPs mentioning *growing* in context of *economy* (10 random rows)

31/05/12	National	Mike Sabin	to think that growing the Government is akin to <i>growing</i> the <i>economy</i> .
26/11/14	National	Melissa Lee	This side is actually focused on <i>growing</i> our <i>economy</i> , and this National Government has
23/07/09	National	Bill English	t the poverty the member refers to is a healthy , <i>growing</i> <i>economy</i> that lifts incomes , creates jobs , and g
28/10/14	National	Joanne Hayes	We are already feeling the benefits of a <i>growing</i> <i>economy</i> .
15/10/15	National	Bill English	d underpin an increase in revenue , along with a <i>growing</i> <i>economy</i> , and that is how we have got to surpl
21/05/15	National	Chris Bishop	Budget , to continue the New Zealand <i>economy</i> <i>growing</i> strongly .
23/10/14	National	Steven Joyce	In a <i>growing</i> <i>economy</i> -- and , of course , that is what we do
18/05/05	National	John Key	act and retain the skilled workers upon which a <i>growing</i> <i>economy</i> is built ; if so , why has he done exact
02/12/15	National	Paul Foster-Bell	to succeed and to be able to play their part in a <i>growing</i> <i>economy</i> and in a modern workforce .
08/06/11	National	Bill English	All of those factors will help to underpin a <i>growing</i> <i>economy</i> .

Table 5.11 Concordance of Labour Party MPs mentioning *growing* in context of *economy* (10 random rows)

28/08/12	Labour	Sue Moroney	<i>onomy</i> , actually they planned to supercharge the <i>growing</i> inequality gap .
14/02/07	Labour	Helen Clark	What I know is that emissions have been <i>growing</i> , the <i>economy</i> has been growing , and we have
27/05/04	Labour	Helen Clark	Our <i>economy</i> is <i>growing</i> well , and better than those of most Western countries
16/05/13	Labour	Iain Lees-Galloway	l , it certainly has not been anything to do with <i>growing</i> the <i>economy</i> .
23/05/07	Labour	David Parker	overnment has overseen an <i>economy</i> that has been <i>growing</i> at above our historical norms .
27/08/13	Labour	Clare Curran	The tenacity is particularly the tenacity of a <i>growing</i> economic force in New Zealand , which I would
19/05/11	Labour	Brendon Burns	retoric about growing the productive sector and <i>growing</i> the <i>economy</i> , but , in fact , the Government is
19/10/06	Labour	Michael Cullen	rew by 24 percent , making it one of the fastest <i>growing</i> in the OECD .
18/08/10	Labour	Stuart Nash	I have not seen any plan for <i>growing</i> the <i>economy</i> , for creating jobs , and for provid
18/09/12	Labour	David Clark	So we have a <i>growing</i> grey <i>economy</i> and an encouragement for people

Table 5.12 Concordance of National Party MPs mentioning *growth* in context of *economy* (10 random rows)

28/05/09	National	Amy Adams	Id our <i>economy</i> for a strong recovery , to create <i>growth</i> , to create jobs , to look to the future , and to ke
22/05/12	National	Nick Smith	You see , whether it is in terms of the <i>growth</i> agenda that this Government has around infrast
05/03/03	National	Lockwood Smith	about Government 's policies are not helpful to <i>growth</i> .
05/04/12	National	Bill English	g , and property speculation that had driven our <i>growth</i> through the previous 10 years .
22/06/10	National	Bill English	the basic imbalance in the <i>economy</i> : too much <i>growth</i> in the domestic and Government sectors and no
09/08/11	National	Bill English	because it promotes higher incomes and higher <i>growth</i> .
05/04/12	National	Steven Joyce	ce again decrying something that would lead to <i>growth</i> in the New Zealand <i>economy</i> .
21/03/12	National	Bill English	ed more than 8 percent per year , reflecting fast <i>growth</i> in Government spending and big increases in d
29/07/10	National	Gerry Brownlee	Zealand <i>economy</i> , whereby we are expecting <i>growth</i> to occur that will deliver higher incomes .
15/05/14	National	Bill English	competitive <i>economy</i> is set out in the Business <i>Growth</i> Agenda , and the Budget adds a number of new

Table 5.13 Concordance of Labour Party MPs mentioning *growth* in context of *economy* (10 random rows)

20/05/10	Labour	David Cunliffe	the economy and put it on a sustainable path to growth has been broken by Treasury 's own calculation
19/05/05	Labour	Michael Cullen	will slow over the next two years to an annual growth rate of about 2 1/2 per cent .
15/04/14	Labour	Grant Robertson	better economic outcomes , higher wages , more growth for the New Zealand economy , and more oppo
16/02/16	Labour	Stuart Nash	Research and development is vital to the growth of an economy like ours .
20/05/03	Labour	Russell Fairbro	The growth rate of our economy is strong , as is that in Haw
04/06/13	Labour	Andrew Little	venting the Taranaki economy from meeting its growth aspirations and thereby contributing to the nati
25/05/04	Labour	Michael Cullen	g any major impact from climate change on the growth of the economy the day after tomorrow .
22/05/12	Labour	David Parker	ovements to our tax system to encourage export growth rather than growth of the speculative parts of ou
23/05/07	Labour	David Parker	We will see more business and we will see more growth in our economy , as a consequence .
31/05/05	Labour	David Cunliffe	order to bring the economy back to a sustainable growth path . "

As the concordance lines illustrate, not all instances of *grow/growing/growth* were directly related to *economy*. The sample concordance lines illustrate this, with speakers saying *employment*, *people*, *technology*, *businesses*, *inequality gap*, *sectors*, *spending*, *export* and *emissions* as things that *grow* or are *growing* or can demonstrate *growth*. Beyond this sample of concordance lines, words that were commonly associated with *grow/growing/growth* in the context of *economy* were *jobs*, *business*, *export/exports*, and *investment*. That these words were used in the context of *economy* indicates that growth in non-*economy* things was being related to *economy* by speakers. Sometimes this was explicit, most obviously when speakers used *grow/growing/growth* repeatedly, for example:

This Government is focused on growing the economy, on growing jobs, and on lifting New Zealand up to the top half of the OECD

John Key, NAT, Questions for Oral Answer, March 10th, 2009, NZPLC#255818

... some of that money will go towards creating economic growth—towards growing jobs and growing this economy—and driving our economy towards export-led recovery.

Stuart Nash, LAB, Regulatory Reform Bill — First Reading, February 15th, 2011, NZPLC#320743

All we do, and all we have attempted to do in the time we have been in Government, is aimed at giving people the opportunity to grow and thrive and giving our economy the opportunity to grow and thrive.

Ian McKelvie, NAT, Debate on Prime Minister's Statement, February 12th, 2014, NZPLC#421734

It is not focused on the growth of the economy, but on the growth of surpluses, welfare dependency, and bureaucracy.

Bill English, NAT, Budget Debate, May 15th, 2003, NZPLC#112771

Sometimes the connections were not explicit and further context is required to understand the connections. For example, the concordance lines for National MPs highlights mentions of *growth*

agenda and *Business Growth Agenda*, which was a “pro-business” programme of policies (Roper, 2015, p. 33) initiated from the 50th parliament by the National government, with the expressed intention of promoting economic growth.⁹²

A basic assumption of rhetoric related to the economy by the two major parties, National and Labour, is clearly that economic growth is good. This is demonstrated by the preoccupation of speakers with economic growth as a positive “end” of government action, by the claimed benefits of economic growth for the political community (that growth is also a “means” to other good “ends”), by the tendency of government speakers to celebrate good growth statistics, by speakers references to *more/stronger/faster* growth, and by the tendency for speakers to problematise low, no, or negative growth and criticise governments and their actions when growth rates were unacceptable. MPs from the National and Labour parties spoke as if economic growth is advantageous and as if it is should be an important orientation of good governments.

The background to the Green Party discussed in section 5.2.3 raised the Greens’ historic critique of assumptions about growth which is entrenched in key party documents and this clash of ideas would suggest there would be detectable differences between the rhetoric of the Greens and those of the major parties related to the economy. And, as expected, the Greens do obviously deviate in their *economy*-talk from the major parties in terms of the strength of collocation with words related to growth as was indicated by Table 5.7. In contrast to the major parties’ pervasive referencing of growth (*grow, growth, growing, grew, grown, and grows*) once every four sentences for National MPs or once every six sentences for Labour MPs, the Green MPs used these growth-words once every twenty sentences. When the Greens do use growth-words on the context of *economy* it is often to be critical, for example:

We need a transition strategy away from a growth economy to a steady-state economy

Nandor Tanczos, GRN, Valedictory Statement, June 26th, 2008, NZPLC#239242

⁹² This was the rationale for establishing a “super ministry”, the Ministry of Business, Innovation and Employment, which merged the functions of multiple government departments and ministries (Beehive.govt.nz, 2012b, 2012a).

Only on “Planet Key” can the number of kids remaining in poverty increase despite the economy growing 12 percent since 2010.

Denise Roche, GRN, Debate on Prime Minister’s Statement, March 1st, 2016, NZPLC#438961

The overarching goal is economic growth, and if the economy can be grown bigger by being dirtier, less fair, and less sustainable, that is what the Government will back.

Jeanette Fitzsimons, GRN, Debate on Prime Minister’s Statement, February 12th, 2008, NZPLC#235888

The Greens also tend to highlight problems that are growing as a critique of the government’s priorities in relation to the economy (e.g. *inequality, environmental deficit, carbon pollution*). Given the Greens are at odds with the dominant idea of the good economy advocated by the two major parties, they face the interesting dilemma of whether to critique the growth economy as this critical stance risks sounding unorthodox when set against the norms of growth-talk in the rhetoric of the other political parties. The Greens do talk about growth in more positive terms. When they do, it is to reinterpret and broaden the meaning of growth to encompass ideas of wellbeing or prosperity or to advocate for a more limited kind of growth, for example:

to actually put the policy settings there, to put the funding there, and to provide the practical assistance that will grow our small companies, grow our economy, and really give us some genuine growth, and some genuine prosperity, which this country needs—growth that is sustainable, growth that meets the needs of current demands.

David Clendon, GRN, Budget Debate, May 26th, 2010, NZPLC# 288098

This illustrates the Greens’ speaker drawing on the common phrase *grow our economy*, but the kind of growth is qualitatively different. There are other examples where speakers from the Greens exploit the growth metaphor without appealing to a growing economy, for example:

the Coast would then have the beginnings of the infrastructure it needs to grow a local, independent, and sustainable economy that is not reliant on the destruction of the very natural resources on which it depends.

Metiria Turei, GRN, General Debate, May 3rd, 2006, NZPLC#186063

Here the goal is to *grow* a specific kind of economy, the end-result being a qualitatively different kind of economy. Although the Greens are critical of economic growth and did talk about problems and

alternatives, an important result from this analysis is that they are **not often** talking growth and speakers from the Greens tended to prioritise other things when they talk *economy*.

5.5.1.2 The *our*-ness of the economy: *economy*-talk is nation-talk

While speakers from National and Labour demonstrate assumptions about economic growth in relation to *economy*, speakers from all three parties analysed are continually and overtly appealing to the nation as they talk *economy*. Appeals to the good of the nation and citizens were common-place. They do this in a variety of ways, including use of words featured in the top collocates for all three parties, including *new*, *zealand*, *zealanders*, and the pronoun *our* (see Table 5.6). This nation-talk was most obviously indicated by the strong collocation between *New Zealand* and *economy*, including phrases like *the New Zealand economy* or *New Zealand's economy* or *the economy of New Zealand* (see Table 5.14). In addition, *New Zealanders* was mentioned frequently in the context of *economy* (see Table 5.15). *New Zealanders* in the context of *economy* was frequently prefixed by *for*, that is *for New Zealanders*, or variations like *for all New Zealanders* or *for hardworking New Zealanders* to emphasise who action and concern is directed towards.

Table 5.14 Concordance of MPs mentioning *economy* in the context of *New Zealand* (10 random rows)

16/12/08	Labour	Moana Mackey	when that will severely damage New Zealand's <i>economy</i> and the investment of hard-working small-business
14/02/12	Labour	Andrew Little	union gave me insights about the New Zealand <i>economy</i> ; about how we create wealth ; about how we ex
14/12/04	National	Nick Smith	w Zealand will continue to have problems , our <i>economy</i> will be held back , and our environment will no
08/04/09	Labour	Phil Twyford	Auckland , additional GDP in the New Zealand <i>economy</i> of \$ 507 million , and additional GDP in the Au
27/05/15	National	Nuk Korako	Today the New Zealand <i>economy</i> continues to grow , and so does the Māori triba
21/03/13	Labour	David Clark	RRB- Bill would be the silver bullet to save the <i>economy</i> , as he was depicting it .
15/03/16	Labour	David Cunliffe	is going to happen to the broader New Zealand <i>economy</i> ?
22/07/15	National	Bill English	e might assume , simply because in the broader <i>economy</i> the New Zealand dairy industry is significant --
02/05/06	National	Jo Goodhew	ples involved in small businesses that keep this <i>economy</i> going -- and they have the same rights to incomm
02/07/14	National	Jonathan Young	hard work and contribution to the New Zealand <i>economy</i> .

Table 5.15 Concordance of MPs mentioning *New Zealanders* in context of *economy* (10 random rows)

18/03/08	National	Bill English	<i>New Zealanders</i> know that we have a small , open <i>economy</i> , and
15/02/11	National	Tony Ryall	He talked about how we will help <i>New Zealanders</i> to have the skills that they need in order to part
30/01/13	Labour	Damien O'Connor	ing -- the very infrastructure that supports rural <i>New Zealanders</i> , the people who still are the backbone of this e
09/08/11	National	Hekia Parata	All of that money supports all the aspirations of <i>New Zealanders</i> who are committed to being participants in a Fi
12/02/14	National	Jami-Lee Ross	ew Zealand <i>economy</i> were created last year for <i>New Zealanders</i> .
23/09/09	National	Nikki Kaye	For many New Zealanders , particularly young <i>New Zealanders</i> , the measure of a good <i>economy</i> is having a jo
24/09/13	Green	Gareth Hughes	<i>economy</i> , and we are standing up for real jobs for <i>New Zealanders</i> , not for a sector that is going to see environmen
05/05/10	National	Bill English	Many <i>New Zealanders</i> took a cut in hours in order to get through the re
04/08/11	National	Bill English	Both the <i>economy</i> and <i>New Zealanders</i> have been remarkably resilient .
09/12/10	Labour	Maryan Street	ty that delivers benefits on an equitable basis to <i>New Zealanders</i> ... " .

The pronoun *our*, one of the top collocates for National, Labour and the Greens, was also frequently used in the context of *economy* and this also primarily refers to the nation. Table 5.16 provides a small random sample of concordance lines. Across the whole corpus, almost half (46.6%) of mentions of *our* in the context of *economy* were as *our economy*.⁹³ There were also many instances of *our* as pronoun in longer noun-phrases ending with *economy* (for example, *our local economy* or *our low-wage-economy* or *our biologically based economy*). Where *our* was not related specifically to *economy* by speakers it was still mostly indicating the nation (e.g. *our businesses*, *our country*, *our public services*, *our rivers*) rather than other groups speakers identify with (e.g. political parties).⁹⁴ As is shown in Table 5.17, the word *our* was often used repetitively to link *economy* with other ways to signify the nation or other national entities.

Table 5.16 Concordance of MPs mentioning *our* in context of *economy* (10 random rows)

19/09/13	National	Bill English	ly , so that when we put taxpayers ' money into <i>our</i> social services , we get better protection for vul
30/07/13	Labour	Grant Robertson	and it is socially wrong , but it is also a drain on <i>our</i> <i>economy</i> .
14/02/07	National	Nick Smith	ose New Zealanders who did the right thing for <i>our</i> <i>economy</i> and for the environment by planting f
20/03/14	National	Peseta Sam Lotu	The building and constructing sector is vital to <i>our</i> <i>economy</i> .
17/03/10	National	Craig Foss	ity , accountability , and transparency back into <i>our</i> <i>economy</i> and into our structure .
18/02/14	Labour	Shane Jones	<i>economy</i> , but if there is a way of transitioning <i>our</i> <i>economy</i> into other economic activities , then v
12/02/03	Labour	David Parker	Unduly harsh monetary policy strangled <i>our</i> <i>economy</i> quite unnecessarily , yet that old IMF
12/12/06	National	Lockwood Smith	rastructure , because one of the major parts of <i>our</i> <i>economy</i> -- the primary sector of our <i>economy</i>
05/10/11	Labour	Iain Lees-Galloway	ston North play to its strengths , and help grow <i>our</i> region 's <i>economy</i> .
14/05/13	Māori Pa	Te Ururoa Flavell	he cultural , social , and psychological frame of <i>our</i> country .

Table 5.17 Concordance of MPs repeating *our* in context of *our economy* (10 random rows)

23/09/08	National	Chris Tremain	Getting in behind it , and helping it to grow <i>our</i> <i>economy</i> , <i>our</i> businesses , and <i>our</i> property investment ,
21/12/11	Labour	David Shearer	vision for changing New Zealand , for growing <i>our</i> <i>economy</i> , or for investing in <i>our</i> people .
31/07/03	Green	Rod Donald	es so that jobs can be saved , indeed created , in <i>our</i> <i>economy</i> , so that <i>our</i> massive trade deficit -- \$ 2.8 billion
19/06/12	National	Tony Ryall	ch will then allow us to have resources to grow <i>our</i> <i>economy</i> and to grow <i>our</i> investments without having to
24/11/09	National	Craig Foss	fter <i>our</i> environment if we are not looking after <i>our</i> <i>economy</i> .
16/11/10	National	Nathan Guy	It is vital for <i>our</i> reputation , <i>our</i> <i>economy</i> , <i>our</i> pride , and ourselves that <i>our</i> country deli
19/06/12	National	Tony Ryall	that we have this as a part of <i>our</i> plan to protect <i>our</i> <i>economy</i> , control <i>our</i> debt , and move forward in the fut
08/02/11	Labour	Damien O'Connor	ome real aspiration , and some true control over <i>our</i> <i>economy</i> ; otherwise , the Prime Minister 's claim that we
16/02/10	Labour	Carol Beaumont	ies , to their workplaces , to <i>our</i> society , and to <i>our</i> <i>economy</i> , yet this Government sits on its hands .
06/08/13	Nz First	Winston Peters	atamination scare reminds us of how vulnerable <i>our</i> <i>economy</i> is and how vulnerable the consumers of <i>our</i> pro

⁹³ *Our economy* (3936) is second only to *our country* (5211) in a list of bi-grams starting with *our*.

⁹⁴ There are instances where *our* is indicating a political party or the government, and most frequently this occurs in relation to a proposed course of action (e.g. *our plan* or *our Business Growth Agenda*), however in the context of *economy* these are rare and even in those cases there is still the link to the nation, sometimes by repetition of *our* to connect the party with the nation (e.g. see Table 5.17 includes *our plan to protect our* *economy*).

In addition to these top collocates, the nation was also directly referenced by use of *national*, *nation*, and *country*.⁹⁵ However, even where *economy* was not related explicitly to the New Zealand economy⁹⁶ this was its own kind of nation-talk. Some speakers mentioned *economy* in order to specify sub-national economies (e.g. *Māori economy* or *rural economy*), but if not directly relating this to the national economy they implied it. Similarly, speakers talked about other nation's economies, most commonly the *Australian economy*, and, as is illustrated by discussed in section 5.5.2, this also tends to be related to the national economy. Referents for economies beyond the nation-state, for example *global economy* or *world economy* which together account for 2% of mentions of *economy*, were similarly related to the national economy as problematic (especially in the context of the global financial crisis) or as the sphere in which the New Zealand economy competes.

Even where the nation is not indicated overtly, the use of *economy* presupposes that is the national economy that is being referred to. While 14.8% of mentions of *economy* were as *our economy*, in terms of frequency it was much more common that *economy* was preceded by the definite article as *the economy* (9181 times or 34.5% of mentions).⁹⁷ Concordances of a random sample are shown in Table 5.18 (National MPs), Table 5.19 (Labour MPs) and Table 5.20 (Green MPs). Some of the overt ways of invoking the *our*-ness of *economy*-talk that I have highlighted are present, however, it is clear from context that even where explicit cues are not present that speakers are talking about the national economy. The definite article (*the*) functions to express the speaker's assumption that the audience will understand what the referent (*economy*) is (van Dijk, 2012, p. 482). Speakers take-for-granted as obvious to the imagined audience that *the economy* is the economy of New Zealand, that *the Government* is New Zealand's government, that *the House* is New Zealand's House of Representatives. Speakers do not need to qualify *the economy* is New Zealand's except to emphasise

⁹⁵ Common phrases including: *this country's economy* (61), *the economy of this country* (50), *the national economy* (45), *the nation's economy* (14).

⁹⁶ This is important as collocates will reflect patterns for different classes of *economy*.

⁹⁷ Of course, *the economy* also includes the construction *the economy of* (243), which could be *the economy of* <ANOTHER NATION-STATE>, but it turns out this is the exception. Mostly *the economy of* refers to New Zealand (e.g. *the economy of New Zealand* (63), *the economy of this country* (50)) or New Zealand cities or regions (e.g. *the economy of the West Coast* or *the economy of Wellington*). To put the figures for *our economy* and *the economy* in perspective, *New Zealand economy* represented 11.8 of mentions, *this economy* 4.7%, and *an economy* 4%. Even in the case of *an economy*, which might imply an abstract account of the economy, this was often related to the nation (e.g. *an economy like ours*).

this national quality. According to Billig (1995, p. 108), repeatedly “flagging the homeland” in this way reinforces the natural-ness of the nation and he addresses this directly to people’s use of *the economy*: “*the economy* is ‘our’ economy”. This illuminates the use of *the economy* as nation-talk. *The economy* is imbued with *our*-ness by specific and recurring appeals to the nation, but also by the wider context of discourse, by the specific setting of New Zealand’s parliament and the national setting within the spatial confines of the borders of the nation-state New Zealand.

Table 5.18 Concordance of National MPs mentioning *the economy* (10 random rows)

14/02/12	National	Simon Bridges	He said to me that doing a good job by <i>the economy</i> comes down to two things .
09/04/14	National	Chris Tremain	second part of that wider Government plan for <i>the economy</i> of building a more competitive economy , one of
23/02/10	National	Bill English	problem there is that he is using nominal growth in <i>the economy</i> , when the standard measure is real growth in the
19/02/13	National	Maggie Barry	te , what steps is the Government taking to help <i>the economy</i> become more competitive ?
25/05/04	National	Shane Ardern	in business in New Zealand who actually drive <i>the economy</i> .
30/03/10	National	Bill English	responsibility for the problems it has created in <i>the economy</i> .
13/02/13	National	Louise Upston	about how we are addressing the challenges in <i>the economy</i> , about which members on that side of the House
10/10/07	National	Maurice Williamson	But everyone knows that as a percentage of <i>the economy</i> , if that amount of money were to grow we should
10/12/09	National	Allan Peachey	s will function to the standard and the level that <i>the economy</i> of this country and its future require .
08/06/11	National	Chris Auchincloss	of upper level tax breaks as the way to correct <i>the economy</i> .

Table 5.19 Concordance of Labour MPs mentioning *the economy* (10 random rows)

04/03/14	Labour	David Parker	direct that capital more efficiently to the parts of <i>the economy</i> that need it most .
09/02/11	Labour	Kris Faafoi	so that the people who need help are stimulating <i>the economy</i> and creating more jobs .
15/05/03	Labour	Helen Clark	The facts about <i>the economy</i> speak for themselves .
24/05/06	Labour	Parekura Horomia	National sold the State houses , it put <i>the economy</i> into recession , it slashed \$ 1.3 billion , and it is
30/05/12	Labour	Iain Lees-Galloway	at it can make up for its abysmal failure to grow <i>the economy</i> and bring in the revenue that is required to run
18/02/04	Labour	David Parker	any forecasts regarding tourism 's future value to <i>the economy</i> ?
28/05/08	Labour	Mark Burton	cy of a Government that has carefully managed <i>the economy</i> .
15/02/11	Labour	David Parker	economy forward and achieve the step change in <i>the economy</i> that they promised .
17/06/14	Labour	David Parker	address this -- which is plainly in the interests of <i>the economy</i> even if it is not in the interests of the minority of
19/05/11	Labour	Phil Goff	They must help <i>the economy</i> to grow and they must lift incomes .

Table 5.20 Concordance of Green MPs mentioning *the economy* (10 random rows)

25/07/12	Green	Denise Roche	<i>The economy</i> did not grind to a halt .
23/09/08	Green	Russel Norman	cerns of everyone at the moment is the state of <i>the economy</i> .
29/10/14	Green	Metiria Turei	ld poverty by 30 percent while also stimulating <i>the economy</i> ?
17/09/13	Green	Julie Anne Genter	<i>The economy</i> is just that .
16/09/03	Green	Ian Ewen-Street	forsoke the organic and beef product sectors of <i>the economy</i> for the sake of promoting the GE industry ; if n
17/02/15	Green	Gareth Hughes	open about saying that markets have their role in <i>the economy</i> .
23/05/12	Green	Russel Norman	When Treasury 's own projections show that <i>the economy</i> is becoming more imbalanced , why would he h
24/06/14	Green	Russel Norman	reenhouse gas emissions , which prepares us for <i>the economy</i> of the 21st century , where those who have low
12/02/14	Green	David Clendon	The Prime Minister 's primary focus was on <i>the economy</i> .
26/08/15	Green	Jan Logie	We have been hearing a lot about <i>the economy</i> in the House this afternoon .

The *our*-ness of *economy*-talk might seem banal because this is a national parliament and the deliberations within it are oriented to the affairs of the nation-state, but this banality is part of the point. The implication is that: what is good for the economy is good for the nation. When speakers do explicitly refer to the nation they are appealing to the imagined audience, the “imagined community” (Anderson, 1991), to take their side in the debate. Speakers connect their stance and their arguments to the higher purpose of the nation and their party’s economy project to the national project. In particular, the use of the pronoun *our* in collocation with *economy* connects economy and nation explicitly, as well as implicating the speaker and their party in the shared desire for national advantage. Kurz et al. (2010, p. 612) have also observed the rhetorical use of “our economy” as an appeal to “national interest” in the Australian parliament in relation to climate change debates.

Just as *New Zealand* is absent when speakers say *the economy*, there are instances where *the economy* is absent when speakers use *New Zealand* in ways characteristic of *the economy*. This is most obvious when looking at growth-related words, where there are examples like this:

We are growing New Zealand.

Steven Joyce, NAT, Adjournment — Sitings of the House, December 12th, 2012, NZPLC# 91661

Maybe this bill is a central plank in the Government’s economic plan to grow New Zealand.

David Shearer, LAB, Westpac New Zealand Bill — Third Reading, June 15th, 2011, NZPLC# 328250

We know New Zealand is growing at 3.5 percent a year, one of the fastest rates in the world.

Amy Adams, NAT, General Debate, April 29th, 2015, NZPLC# 388937

This usage is not related to population or borders or some other characteristic with size, *New Zealand* is taking on patterns associated with *the economy*. Although not common, this demonstrates the national character of *economy*-talk and the overlap between nation and economy exploited by speakers in their appeal to the greater good.

Although these appeals to the nation are important for all parties, the Greens are in the unique position of not being able to rely on the appeal to dominant ideas about economic growth and so this national appeal is significant for the Greens. Speakers from the Greens were more likely to use *our economy* than other parties. The Greens emphasise ideas about the interconnectedness of eco-system

and people and the common risks to the wellbeing of the system and a common future in which these risks will be realised unless common action is taken, and in the context of a national parliament this common-ness is bounded by the nation. The Greens' appeal to the national community, although an appeal to a better common future, is also a kind of negative rationale: unless *we* collectively act now, *our economy* is in peril.

These assumptions about economic growth and the national good are key aspects of political rhetoric related to the economy and inform subsequent analysis and discussion. The appeal to the nation is a common strategy for Labour, National and the Greens, however the Greens diverge on the key desired norm of a growth economy, an idea underpinning the rhetoric of the major parties and used to rationalise government action.

5.5.2 Key argumentative strategies, key disagreements: analysing the use of the economy by political parties over time using key collocates analysis

Two insights from this preliminary analysis and initial analysis of collocates informed the remainder of the analysis. Firstly, attending to the timing of changes is useful for distinguishing two broadly different patterns of use. The collocates for political parties without this time dimension makes it difficult to determine whether patterns were characteristic of specific time periods or a more constant feature of discourse. Ordering the concordances by date or restricting concordance views to different parliamentary terms revealed the strategic use of language by party representatives at specific points in time as well as confirming more pervasive patterns, namely recurring appeals to growth and the nation. Understanding the timing of use by parties was helpful to distinguish between collocates that were strongly associated with specific debates or situational concerns, those that reflected specific rhetorical strategies of a party, and those that indicated more pervasive norms of use.

A second and related insight from closer engagement with the data was a practical one. The large amount of data summarised by these collocation measures made it very time-consuming to gain a deep understanding of what speakers are saying and doing. It appears that the quantitative analysis must be more fine-grained to detect the timing of patterns of use by political parties and to render

patterns that can be more meaningfully analysed by concordancing and closer analysis. This led to developing a quantitative procedure that allowed me to distinguish different kinds of time-related patterns of use by political parties.

My approach to analysing patterns of use by political parties over time was to combine the conceptual underpinnings of collocation analysis with keyness analysis,⁹⁸ a form of analysis I am referring to as **key collocates analysis**. As its starting point, the technique takes collocates of a word across a corpus and assesses the degree of difference in these co-occurring words between subcorpora within that corpus. In this case, the analysis was conducted based on the utterances of each of the three political parties, the collocates of *economy* derived for each party and the keyness of each word-pair calculated across adjacent time periods based on parliamentary terms. The collocation measure provides some overall assessment of prominence in relation to other collocates across the time period, and measures of keyness allow a rapid determination of whether the prominence is attributable to particular time periods or a more regular feature of discourse.⁹⁹ Here again the collocation span is the sentence level (although this could use other collocation spans) and the collocation statistic used logDice (although this would make sense with other effect-size measures of collocation or the frequencies themselves). To assess keyness I used Log Ratio as a comparable effect size measure, Log-Likelihood as an indicator of the amount of evidence for a claim of difference (Hardie, 2014b, 2014a)¹⁰⁰ alongside the raw frequencies and proportions relative to mentions of *economy*.

The technique allows efficient identification of changes in patterns of use and the direction, magnitude and timing associated with these changes. As can be shown in Figure 5.2 and Table 5.21 it is possible to differentiate patterns of usage that are variable across time periods (*economy+productive*) from those that vary less and reflect more constant patterns of use

⁹⁸ To identify changing patterns of association with *economy* over time I trialled a number of techniques, including plotting normalised frequencies of word pairs and comparing lists of collocates for a party for each specific time period. The main problems with these techniques was the interpretability of results.

⁹⁹ One caveat is that the change and stasis detected are related to the time period chosen, i.e. a parliamentary term. This specific discrete categorisation could miss usage associated with a much shorter time period or changes occurring over longer periods of time. These changes are also meaningful and could be detected by basing the comparisons on different (both longer and shorter) periods of time. As it is, for the time periods compared, this technique revealed patterns that were interpretable on closer examination.

¹⁰⁰ By “indicator” I mean that this is not the sole determinant of this. For instance, in comparing something has been unsaid and then it is said is meaningful and may be significant (although not statistically).

(*economy+zealand*). The x-axis of the graph shown in Figure 5.2 represents different parliamentary terms being compared, while the y-axis represents the direction and magnitude of changes between terms based on the Log Ratio statistic. A positive bar line indicates an increase in usage between parliamentary terms and a negative bar line indicates a decrease in usage. The height of each bar represents the degree of change, taller bars indicating more change in relative terms. The intervals on the y-axis do not represent linear changes, a Log Ratio of 0 represents no change, a Log Ratio of 1 represents a doubling of relative usage, a Log Ratio of 2 increasing four times, a Log Ratio of 3 increasing eight times and so on.¹⁰¹ Table 5.21 provides the set of measures used for this analysis to understand usage in absolute and relative terms in different parliamentary terms (i.e. Frequency and Proportion) and changes between terms (Relative Frequency Ratio, Log Ratio and Log-Likelihood).

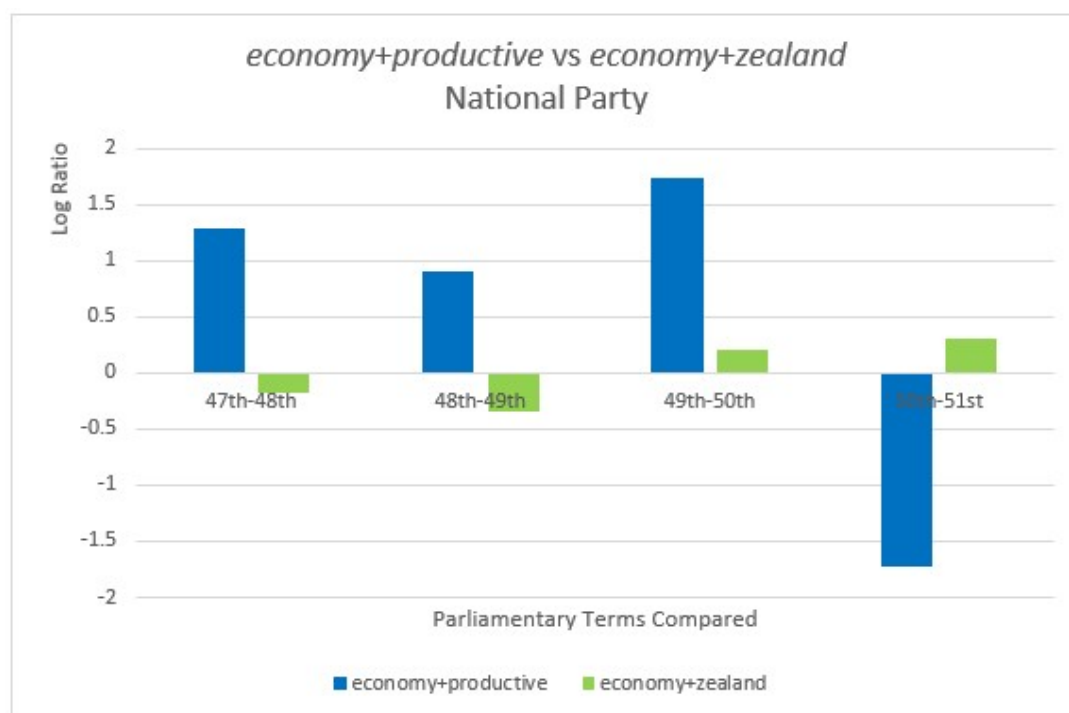


Figure 5.2 Keyness of collocates *economy+productive* and *economy+zealand* for National Party between parliamentary terms

¹⁰¹ Similarly, a Log Ratio of -1 represents a halving of usage, -2 a quarter as much usage, and so on.

Table 5.21 Key collocates data for *economy+productive* and *economy+zealand* for National Party*economy+productive* (National)

Parliament	Total	Frequency	Proportion	Rel Freq Ratio	Log Ratio	Log-Likelihood
47th	772	5	0.006			
48th	1199	19	0.016	2.447	1.291	3.698
49th	3928	117	0.03	1.88	0.91	7.546
50th	4088	408	0.1	3.351	1.744	159.37
51st	2085	63	0.03	0.303	-1.724	102.412

economy+zealand (National)

Parliament	Total	Frequency	Proportion	Rel Freq Ratio	Log Ratio	Log-Likelihood
47th	772	241	0.312			
48th	1199	330	0.275	0.882	-0.182	2.194
49th	3928	855	0.218	0.791	-0.339	12.643
50th	4088	1025	0.251	1.152	0.204	9.355
51st	2085	648	0.311	1.24	0.31	17.982

The potential of the technique also lies in the ability to focus on specific time periods and compare what different parties are doing at the same point in time and how patterns of use interact in a way that informs concordancing and closer analysis. Since Log Ratio is a relative measure it is possible to compare and visually represent the magnitude and direction of changes between parties as well as across time. As Figure 5.3 and Table 5.22 indicate, both National and Labour increased their use of *economy+plan* between the 48th and 49th parliaments, however Labour's increase was much larger in relative terms and concentrated more in the 49th parliamentary term. The task of analysis from this point is to understand the nature of and reasons for the change through a closer analysis starting with a much more manageable set of concordance results.

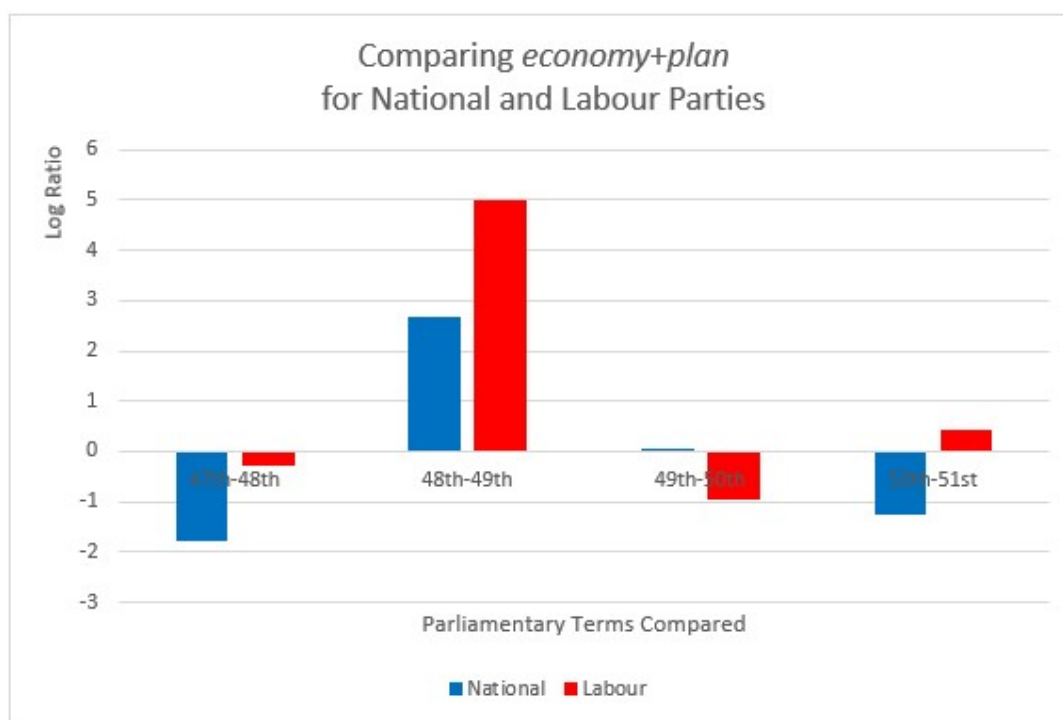


Figure 5.3 Comparing keyness of collocates *economy+plan* for National and Labour parties

Table 5.22 Key collocates data for *economy+plan* for National and Labour parties

economy+plan (National)

Parliament	Total	Frequency	Proportion	Rel Freq Ratio	Log Ratio	Log-Likelihood
47th	772	11	0.014			
48th	1199	5	0.004	0.293	-1.773	5.717
49th	3928	104	0.026	6.349	2.667	29.353
50th	4088	113	0.028	1.044	0.062	0.101
51st	2085	24	0.012	0.416	-1.264	18.103

economy+plan (Labour)

Parliament	Total	Frequency	Proportion	Rel Freq Ratio	Log Ratio	Log-Likelihood
47th	1020	3	0.003			
48th	1254	3	0.002	0.813	-0.298	0.064
49th	2326	179	0.077	32.168	5.008	130.086
50th	2178	86	0.039	0.513	-0.963	27.515
51st	874	46	0.053	1.333	0.415	2.398

When initially trialling analysis based on this technique, I investigated key tokens that were associated with the change of government and opposition roles to confirm and demonstrate the validity of the technique. I suspected there would be words associated with the change of government and opposition roles and so identified tokens that increased for one party while decreasing for the

other. This did reveal a distinct and meaningful set of tokens associated with *economy* that accompanied the change of government. The transition from the 48th to the 49th parliaments marked a change of government in 2008 and associated with this change was a set of tokens that was used proportionately less by National MPs in government and more by Labour MPs in opposition (see Figure 5.4).¹⁰² These include tokens strongly associated with parliamentary question time and questioning more generally (*?*, *agree*, *does*, *if*), ways of addressing government ministers with responsibility related to the economy (*he*, *his*, *minister*),¹⁰³ ways of referring to or citing the speech of ministers and experts (*said*, opening [*''*] and closing [*''*] quotation marks), and markers of negation (*no*, *not*). Interestingly, and reinforcing the assumptions about the nation discussed in Section 5.5.1.1, *Australia* appeared to serve as a frequent negative comparison used to criticise the government on the relative performance of New Zealand's *economy*. This set of changing collocates, associated with the speech acts of opposition party, are fundamental to the change of government and alerts us to the ongoing and routine challenging of government regarding the economy in parliament.

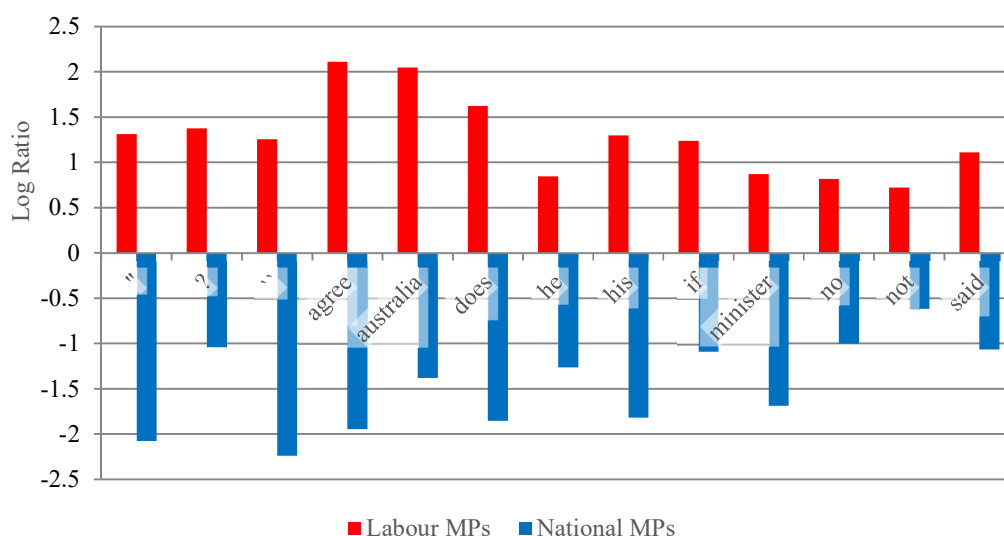


Figure 5.4 Key collocates associated with the change of government and opposition roles between the 48th and 49th parliaments.

¹⁰² To do this I programmatically calculated keyness between parliamentary terms for the top 1000 collocates by Log Dice for Labour and National. Given some of these words are frequent features of discourse it would be very difficult to detect these kind of proportional changes without quantifying the degree of change over a large pool of collocates. In other words, it is probably easier to notice changes from infrequent to frequent or vice versa, but much more difficult to notice changes in the degree of use of frequent words.

¹⁰³ Again, the gender typically associated with the ministerial roles associated with *economy* is clear.

In the following sections I examine key collocates for the 49th, 50th and 51st parliaments. I will concentrate on the major debates between National and Labour, although I will discuss the Greens where relevant. The transition to the 49th parliament was a point in time where parliamentarians use of *economy* increased dramatically and, in the analysis that follows, as well as identifying key features of political rhetoric related to the economy and specifically what party speakers were doing when there was an increase in use of a collocate, I aim to identify reasons for this change. This requires going beyond what was being said using the combination of collocate and *economy*, to understand what each of these patterns reveals about the strategic use of *economy* in relation to points of disagreement in parliament.

5.5.2.1 The 49th parliament: a crisis and a new government's programme

What explains the large increase in MPs use of *economy* in the 49th parliament? And, what were parties doing post-2008 when they were talking more *economy*? The 2008 election was timed with a financial crisis with wide-ranging social, political and economic effects and it seems reasonable to expect that parliamentarians were focused on how the government should respond to the crisis and recession and specific related problems (e.g. an increase in unemployment). Consistent with this supposition, there were substantial increases detected in collocations that intuitively link to the crisis, including *economy+recession*, *economy+government*, *economy+plan* and *economy+jobs* for both National and Labour MPs and *economy+financial* and *economy+crisis* for National MPs. However, on closer examination of the concordance lines related to these collocations, the increase in 2008 cannot be reduced to a reaction to crisis.

Analysis of National party MPs use of the collocates *economy+financial* and *economy+crisis*, which were often used together with *economy* as *financial crisis*, and the more common *economy+recession* revealed a concern with the period *before* National was in government. National MPs argued that the economy was already problematic before the financial crisis and before National's term in government and during Labour's term the economy was already in recession and

this became important as they justified their new programme for the economy.¹⁰⁴ In contrast, Labour speakers' use of *economy+recession* indicated their criticism of National's lack of a direct response to the recession and by the end of the term were accusing that the government, given their argued failure to respond directly to the crisis, was now responsible for a *double-dip recession*. On one level, speakers were rhetorically responding to the crisis and debating in a context of crisis, but National MPs, the governing party, were justifying the government's new programme for the economy and opposition MPs were contesting it.

Establishing the direness of the situation National inherited and the problems of the Labour government's economy was a common feature of the rhetoric of National speakers throughout the 49th parliamentary term to justify the new government's programme and the National government itself. Use of the collocation *economy+previous* was a noticeable feature of the 49th parliamentary term for National party speakers. *Previous* was typically modifying *government* or some other way to refer to the previous government's term (e.g. *previous 9 years*, *previous administration*). References to the previous government and the economy under the previous government was overwhelmingly negative, for example:

You see, the truth is we inherited an economy that was in about as good a shape as the previous Labour Government was.

John Key, NAT, Budget Statement — Budget Debate, May 28th, 2009, NZPLC#265053

In fact, if the previous Labour Government had not made such a mess of our economy 4 years ago, we would be in a much better state now; we would be seeing through the recession in a much better way, and there would be more jobs.

Katrina Shanks, NAT, Social Assistance (New Work Tests, Incentives, and Obligations) Amendment Bill — In Committee, August 17th, 2010, NZPLC#298627

Under the mismanagement of the previous Government the New Zealand economy went into recession early in 2008.

Bill English, NAT, Questions for Oral Answer, April 20th, 2010, NZPLC#292726

¹⁰⁴ Speakers repeatedly used phrases like *before the global financial crisis*, *before the global recession*, *before the rest of the world* in the context of saying the economy was in recession as a result of the Labour government.

Attention to the economy of the previous government was also evident with an increase in use of the collocation *economy+grew*. This began being used in the lead-up to the 2009 budget and was not to report growth rates in the period of National's term in government, but to problematise growth under Labour by reporting poor economic growth rates or contrasting rates of economic growth with high rates of growth in government spending, for example:

Over the past 5 years, core Crown spending grew by 50 percent, whereas the economy grew by 25 percent.

Bill English, NAT, Questions for Oral Answer, June 25th, 2009, NZPLC# 261902

They showed that in the last 3 years of the failed previous Labour Government, before the impact of the global financial crisis, our economy grew by less than 1 percent a year.

Tony Ryall, NAT, Debate on Prime Minister's Statement, February 17th, 2010, NZPLC# 280745

These criticisms related to the amount of growth under Labour's economy, but also a problematic kind of growth that was encouraged by the government spending that National argued they were aiming to reduce.

Labour's economy was further problematised in the way National speakers commonly articulated their agenda for the economy. There was a noticeable increase in the collocation *economy+towards* and the prototypical patterns of usage of this began towards the end of 2009 through to the period of the Budget Statement in May 2010. This quote from the Finance Minister Bill English exemplifies this:

We also need to tilt the economy towards savings, investment, and exports, and away from the excessive consumption, the unsustainable increases in Government spending, and the excessive borrowing that characterised the last 4 or 5 years of the previous Government.

Bill English, NAT, Questions for Oral Answer, May 29th, 2010, NZPLC# 289126

The use of *tilt*, *rebalance*, and *rebalancing*, drawing on the metaphor of balance, was common in the context of *economy+towards* and this was not only a positive assertion of intention, but also implied that the economy, after a Labour government, was out of balance.¹⁰⁵ The good things that the National government was orienting the economy towards were, as in the example provided, most commonly

¹⁰⁵ It should be noted that Hope (1991, p. 339) identifies the use of *balance* as a feature of arguments for economic reforms in the 1980s in New Zealand.

exports, savings and investments. There were significant increases in use of *economy+exports*, *economy+savings*, and *economy+investments* during this term. These were often used together as the example illustrates, but there were also many examples of National MPs highlighting one or other of these good qualities of the economy that National wanted to encourage. The use of *towards* was often accompanied by *away from* and the use of *away from* more generally flagged the bad qualities that National speakers were attributing to Labour's economy. Most noticeable and detectable as key collocates were *spending* (often as *government spending*), *borrowing* and *debt*, but other bad qualities were mentioned, including *consumption* and *housing/property speculation*. The bad qualities that National MPs associated with Labour's economy were often emphasised as *excessive*.

In addition to these direct and critical references to the previous government and their economy, National party MPs established their economy using the comparatives *stronger* and *better*, sometimes together, in collocation with economy. The collocation *economy+stronger* (typically as *stronger economy*) was particularly significant because it can be contrast with the collocation *economy+strong* (typically as *strong economy*), which was a common feature of Labour's rhetoric while they were in government.¹⁰⁶ Speakers commonly used the *build/building* or other verbs that positioned *government* as active agent who was bringing about the *stronger economy* or the *foundations off/for a stronger economy*. National MPs also suggested their government would bring about a *better economy* or *better* things related to their economy (e.g. *jobs, standard of living, society*). During the 49th parliament, particularly in 2011, National Party MPs listed *better public services* as a goal of the National government along with their goal of a *stronger economy*. However, as has already been indicated, an important component of National government's plan for better public service was to limit and reduce government spending, justified as part of their attempts to *rebalance* the economy.

While National MPs established their programme and position with respect to the economy by problematising Labour's economy, National speakers' appeals to *jobs* was the key positive

¹⁰⁶ Note that Partington (2003, p. 205), studying White House press briefings, indicated a tendency for *strong* to collocate with *economy*.

rationale for their programme. As was shown in Table 5.6, the collocation of *economy* with *jobs* was significant for both major parties: it was the third highest collocate for National MPs and fourth highest collocate for Labour MPs. However, the overall importance of *economy+jobs* was due to a large increase in usage for both National and Labour in the 49th parliament and a smaller, but still significant, increase again in the 50th parliament.¹⁰⁷ Talk of *jobs* was important in the 49th parliament. Exemplifying concerns about an expected spike in unemployment, the new National government organised a Jobs Summit early in their term in February 2009, which included representatives from business, unions, the public service and political leaders. Although there are examples of National MPs reporting on unemployment rates, the increased use of *economy+jobs* was to indicate that jobs were the priority of policy and this was used to justify specific government action (e.g. tax cuts) and the direction of government action more generally.

Analysing use of *economy+jobs* allows us to understand a key difference and point of disagreement between National and Labour in the 49th parliament. This dispute centred on kind of government action that was appropriate in the context of a crisis and recession. Speakers from National increased their use of the collocations *economy+plan*, *economy+focused*, and *economy+help* from early in the term. National's *plan* was directed to the *economy* and this was frequently identified explicitly using *grow/growth/growing* as a growth economy. Similar, ideas were articulated by the National speakers' use of *focused* (e.g. *focused on the economy*, *focused on growing the economy*) and *help* (e.g. *help our economy*, *help grow the economy*) to assert the priority of the National government. National MPs argued their actions were oriented to a qualitative change to the economy and that this changed economy would be optimised for the right kind of growth. Ultimately, it was this growth economy itself that National argued would *create jobs* and *create* better kinds of *jobs* (e.g. *real jobs*, *sustainable jobs*, jobs with *higher incomes*) and not government through its spending. Speakers from the National party aligned the goal of the orientation of their economic programme, a reformed growth economy that would create jobs, as both desirable in the long term and as the remedy to the immediate situation of crisis. A range of actions were justified as promoting a growing

¹⁰⁷ In general, across the corpus, *jobs* was often preceded by *more* or by quantities (e.g. *200,000 jobs*).

economy, which would in turn create jobs. This included a tax cut that National MPs had previously argued for by appealing to the unfair taxing of people given that the government was running a fiscal surplus.

National's argument that *jobs* would eventuate from their actions to rebalance the economy opened the government up to recurring criticism from Labour MPs that the Government could do more to directly grow the economy and create jobs, predominantly in the form of direct fiscal stimulus and not taking steps to reduce government expenditure. Speakers from both National and Labour frequently used the different forms of the verb *create* in the context of *jobs* and *economy*. Whereas speakers from National were likely to position the agency of Government to changing the economy which in turn would *create jobs*,¹⁰⁸ Labour MPs positioned the agency of Government as directly able to *create jobs*, by orienting policy to growth and actions to *stimulate the economy*, and were therefore accusing National of not taking this action. This is also evident when analysing Labour MPs increased their use of *economy+grow* (often as *to grow the/our economy*). Speakers questioned whether specific government policies, including deviations from the policies of the previous Labour government, or National's programme more generally would produce growth.¹⁰⁹ Like National MPs, speakers from Labour increased their use of the collocate *economy+plan* in the 49th parliamentary term.¹¹⁰ Labour MPs' use of *jobs* and *grow* in the context of *economy+plan* is revealing because National MPs rarely mentioned *jobs* in the context of *plan*. Most commonly, Labour's use of *plan* was not to assert a plan, but rather to criticise National's lack of plan and this was often by accusing the government of having *no plan*, *no plan to grow the economy* and *no plan for jobs* in a situation where one was needed.

During these debates between National and Labour, Labour speakers challenged the efficacy of National's agenda against their stated goals and specific aspects of National's economic rhetoric.

¹⁰⁸ National speakers' increased use of *economy+create* in the 49th parliament was primarily *create jobs* (and variants), but in some instances this was creating positive things more generally (e.g. *a stronger economy*, *wealth*).

¹⁰⁹ Further evidence for this active role for government is observable in Labour's increased use of *economy+get*. One characteristic pattern of usage that emerged from analysis was speakers asserting that government should *get the economy going/moving* or that it was failing in this respect.

¹¹⁰ In fact, *economy+plan* was the collocate of *economy* with the largest increase for Labour speakers during the 49th parliament. For National MPs *economy+plan* was less strongly associated (LogDice = 9.030) than for Labour MPs and it ranked 65th by the LogDice measure.

Labour's increased use of *economy+productive* in the 49th term is one example of this. Labour's criticism of a failure of direct action with respect to the economy was not to say they were opposed to the goal of a *productive economy*, although this was not a feature of their rhetoric while in government. References to the *productive economy* by Labour speakers was primarily challenging whether the National's programme would bring about, and could even undermine, a *productive economy*. Labour speakers also suggested that National was failing to deliver on the promises of their economic rhetoric. The increase in the collocation *economy+going* is partly explained with Labour's use of phrases like *going to cause a step change in the New Zealand economy* and *going to turbocharge the economy*, both of which referred to the text of important speeches setting National's agenda for the 49th parliament. On opening parliament in 2010, Key stated:

Our driving goal is to lead a step change in New Zealand's economic performance, so that we can deliver to New Zealanders the jobs, increased incomes, and better living standards that they deserve.

John Key, NAT, Debate on Prime Minister's Statement, February 9th, 2010, NZPLC#281904

The promise of a *step change* had been used in parliament by Key as early as 2007 when National were in opposition,¹¹¹ but in 2010 this became a continuing way to question and ridicule the government for, what Labour argued, were failings to take positive and bold steps for economic development. The use of *turbocharge the economy* (and variants) was also used by Labour through the 49th term to ridicule and attack Nationals' previous bold claims about what their programme would achieve. As Figure 5.5 illustrates, this referenced a speech written by the National government that the governor-general delivered on the commencement of the 49th parliament.¹¹²

¹¹¹ Roughan (2014) references "step change" in relation to the economy and states: "He [Key] never knew precisely what he meant".

¹¹² The "turbo-charging" was not, as Labour MPs insisted multiple times, originally used in reference to the economy, but rather how the government would aid efforts by NGOs in relation to social policy (New Zealand Herald, 2008).

GRANT ROBERTSON (Labour—Wellington Central):

The Appropriation (2011/12 Estimates) Bill could be read as an innocuous set of figures. That is essentially what we see here. It is the estimates. There are some big numbers sitting beside things and there are some smaller numbers sitting beside others. For instance, we could look at the Department of Corrections budget. We would see that something over \$800 million is being spent on prison custodial services and that a somewhat smaller amount of money—about \$140 million—is being spent on reintegration and rehabilitation services, and we could say that that might indicate some of the priorities of this Government.

But this document is much more than just a set of figures. This document should represent the plan that the Government has for the country, for the future of New Zealand. It is not just numbers, but it should be the vision, the bold outline, of where a Government wants to take a country. When we look at this document, we see that it is sadly lacking in any kind of vision or any kind of plan. It does not deliver hope to New Zealanders. Where is the sunny optimism of the Prime Minister from before the last election and in the first year of his term? He is the man who said that there would be this great wealth of opportunity for New Zealanders.

Hon Member:

Ambitious for New Zealand.

GRANT ROBERTSON:

“Ambitious for New Zealand” was the slogan.

Hon Lianne Dalziel:

Turbocharge the economy.

GRANT ROBERTSON:

We were going to turbocharge. The poor Governor-General had to say “turbocharged” in his first speech when this Government came into office. Where has that all gone? It has gone—it has completely gone.

Figure 5.5 Example of Labour’s use of *turbocharge the economy* as interjections during a speech by Grant Robertson (Labour) in the 49th parliament.

Returning to the question of why there was such a dramatic increase from the period National was in government from 2008, it is clear that the context of crisis and recession was important, especially as government and opposition contested the appropriateness of the government’s programme to address the situation. However, the reason the National party was talking more about the economy was that they had actions they wanted to take that were justified for the economy, for growth, for jobs. In arguing their desire to transform the economy, they warranted their discontinuity with Labour’s programme by problematising it. In this respect, National set the agenda for debates about the economy, and Labour and the Greens responded by contesting National’s programme and their economy more generally. Rather than being a point of reflection, deliberation and reconsideration about priorities in the midst of crisis, this period demonstrates how entrenched ideas about growth are. National and Labour debated how the nation could appropriately return to growth.

The importance of *government* in debates about the *economy* in the 49th term is a key finding emerging from this analysis. The role of government was important in National's articulation of their economic programme and these debates about what the government should do in the context of the crisis. This puts the increased use of the collocation *economy+government* for National, Labour and the Greens during the 49th term in perspective. But, more generally, the collocation *economy+government* was a very common feature of *economy*-talk across the corpus. Strong patterns of collocation between *economy* and *government* were common for the three parties studied and to demonstrate how routinely this collocation occurs: on average 25% of sentences with *economy* contain *government* for National MPs, 24% for Labour MPs and 18% for Green MPs. LogDice scores for *economy+government* were 9.76 for National MPs, 9.1 for Labour MPs and 9.28 for Green MPs. Given that parliament is oriented to the legislative programme of government and is intended to operate to fulfill the function of holding governments to account, we might expect that speakers would frequently refer to the government as they debate matters in parliament and that is certainly the case. The collocation of *economy* with *government* in parliament does reflect opposition parties criticising governments and their actions, while governments justify specific policies, their overall programme and their position as government.

As analysis in this section has revealed however, an important feature of this collocation is that speakers were not always talking about the current government. In the case of the 49th parliament, National speakers commonly referred to the *previous government*. There is a more general pattern to this though. Further analysis of usage underpinning the collocation *economy+government* revealed speakers in parliament in a critical dialogue with the actions of past and possible (as well as current) governments they oppose. MPs from the governing party (either Labour or National)¹¹³ often referred to the other party's previous term in government or what the other party would be doing if currently in government.

¹¹³ Note that the Green party were not part of a government over the period of the corpus, although they had supported Labour-led governments on confidence and supply.

National's prioritisation of the economy more generally can be further demonstrated by the strength of collocation *economy+government*, which is to say that National MPs demonstrated more of a tendency to use *economy* with *government* than they did to use these words separately. Or, put another way: National MPs were comparatively less likely to use *government* outside of the context of *economy* than the other parties. Ironically perhaps, the party of smaller government (James, 2015) dedicates more of their *government* talk to *economy*. The analysis for the 49th parliamentary term puts this into further perspective. The reason for the strength of the collocation *economy+government* for National MPs is that cutting taxes and cutting spending and the other things done in the name of limited government, are things a *government* does, things National justified for the greater good, *the economy*. Prioritising the economy is in this sense rhetorically prioritising the *economy* as justification for action by the state.

5.5.2.2 The 50th Parliament: framing and challenging the government's programme

During the 50th parliament, in early 2012, the National Government began framing their *economy*-programme explicitly as one of four priorities of the re-elected National government. National MPs began using the words *building*, *build*, *more*, *competitive*, and *productive* much more with *economy* and these reflected one of the government's priorities: *building a more competitive and productive economy*. In addition to the use of this slogan and close variants,¹¹⁴ there was also significantly more use of *competitive economy* or *productive economy* were used in this term and this was also often with *build* or *building*. Speakers from the National party used the slogan and variants, with government repeatedly positioned as the initiator and agent of change, as self-evident justification for action by government. This named National's economic programme, formalising continuity with the changes initiated by the National government in the 49th parliament and indicating the purpose of future change.

As part of their programme for a *competitive and productive economy*, the National government also coined a label for their pro-business programme in early 2012: the *Business Growth*

¹¹⁴ This slogan itself was flexible. It was sometimes used without *building* or *build* or *more* or with the order of *competitive* and *productive* swapped or using one or the other.

Agenda. National MPs use of *business* with *economy* doubled and there were also large (1.6x) increase for *economy+businesses*. Along with specific mentions of *Business Growth Agenda* with *economy*, there was frequent alignment of *business/businesses* and *economy*. Problems for business were problems for the economy; advantages for business, including pro-business actions by government were advantages for the economy. Most notably speakers depicted a reciprocal relationship between business growth and economic growth whereby business growth leads to economic growth and economic growth leads to business growth. Reflected in the collocation *economy+business* was also government reporting an increase in *business confidence* as positive and proof of the government's success.

Other priorities of the National government, besides their explicit *economy* priority, were reflected in the key collocates for *economy* in the 50th parliament. Most importantly,¹¹⁵ *economy+managing* was reflected in the government priority to *responsibly managing the Government's finances*¹¹⁶ and this establishes continuity with the 49th parliament, in which National speakers had criticised government spending under Labour. The collocation *economy+surplus* further reflected speakers referring to this specific priority and *surplus* occurred frequently with *return to* or *back to* or *back into* in the context of *economy*. What is revealing about this is that in addition to specific ways of referring to the government's finances, there were multiple instances where speakers specified that what would *get into surplus* was the *economy* itself (see Table 5.23).

¹¹⁵ An increase in use of the collocation *economy+christchurch* in this term is mostly explained by this repeated listing of priorities and mostly occurs as *rebuilding Christchurch*, however this also reflects government MPs asserting the significance of the major earthquakes in 2010 and 2011 on the economy and the importance of the government's response.

¹¹⁶ National MPs referred to *managing the economy* and variants across their terms in government. However, as with the collocation *economy+christchurch* the increase in *economy+managing* in this term is attributable to the frequent listing of the four priorities of the National government.

Table 5.23 Concordance of National Party MPs mentioning *surplus* in context of *economy* in the 50th parliament (ordered by word to the left of *surplus*)

28/05/13	National	John Hayes	in 2014-15 , when our economy will be back in <i>surplus</i> .
09/05/12	National	Scott Simpson	at the Government 's books are set to be back in <i>surplus</i> by the year 2014-15 , and that will be the first t
25/06/14	National	John Key	uld say is that at a time when the economy is in <i>surplus</i> , when it is earning more than it is spending , p
21/05/14	National	Melissa Lee	economy has meant that our books are back in <i>surplus</i> .
19/02/14	National	Chris Tremain	This economy will be back in <i>surplus</i> in 2014-15 .
12/02/14	National	Mike Sabin	managed this economy , and we will be back in <i>surplus</i> .
21/03/13	National	Steven Joyce	so raising national savings by getting back into <i>surplus</i> , and developing new financial stability tools , v
21/03/12	National	Tim Macindoe	r local government and to get our economy into <i>surplus</i> .
21/06/12	National	Steven Joyce	as a comprehensive programme to get back into <i>surplus</i> , make our economy more competitive , lift sav
29/05/12	National	Tim Macindoe	to manage the New Zealand economy back into <i>surplus</i> .
24/05/12	National	Peseta Sam Lotu	omy back on the road to recovery and back into <i>surplus</i> .
14/08/12	National	John Hayes	this Government to get our economy back into <i>surplus</i> by 2014 .
14/11/12	National	Jonathan Coleman	the right direction -- halve the deficit , back into <i>surplus</i> by 2014-15 .
25/06/14	National	Nikki Kaye	economy in terms of bringing our country into <i>surplus</i> in one of the most difficult fiscal times ever -- p
11/03/14	National	John Key	a economy that is actually going to be back into <i>surplus</i> ?

Speakers from the National party, particularly in the context of parliamentary question time, began mentioning *outlook* in the context of *economy* more in the 50th parliamentary term. This illustrates a general tendency for National to use their questions and answers in question time to raise and frame evidence that supports the ongoing arguments of government. Question time is a key place in which favourable economic analysis was included in debate. In the case of the 49th parliament, indicated by increases in *economy+reports* and *economy+received*, National MPs asked ministers from the National government questions like: *What reports has he received on the economy?* In the 50th parliament the use of *economy+outlook* included questions by National MPs (e.g. *What is the outlook for the economy over the next 3 years?*) and responses (e.g. *The outlook of the economy continues to be positive*). This strategic use of question time in the 50th parliament offered Ministers the opportunity to highlight the success of National's economic programme, most notably economic growth rates and projected growth rates. However, it was also the opportunity for Ministers to highlight potential problems as reasons to continue government's programme and, as they had done in the 49th parliament, to contrast the government's programme with that of the previous Labour government.

In this context where National was praising their success, the primary strategies for both Labour and Green MPs in the 50th parliament were to contest and problematise the success of National's *economy*-programme. Rates of GDP growth were increasing during the 50th parliament but

underpinning the increased usage of *economy+growing* Labour speakers argued that there was not enough growth or that it was the wrong kind of growth or that the growth was not related to government action. Both Labour and the Greens highlighted New Zealand's *current account deficit* as problematic and not rectified by government policy. Referring to National MPs frequent assertions that they would *rebalance the economy* in favour of exports during the 49th parliamentary term, the Greens increase in collocations between *economy* and *rebalancing/rebalance* in the 50th parliament reflects speakers highlighting National's failure to achieve this goal. Similarly, the collocation *economy+exports* for Labour speakers reflected their criticism of National's failure to realise this rebalancing through growth in exports.

Speakers from both Labour and the Greens also challenged the National government's claims about economic success by questioning the even-ness of advantage related to National's programme for the economy. The collocation of *economy+two-speed* was used by Labour MPs during 2013, almost uniformly as *two-speed economy*, and speakers challenged the unequal nature of growth associated with different geographic regions and different groups. This was also reflected in the increase in use of *economy+parts* by Labour MPs who suggested that *parts of the economy* were benefiting at the expense of other parts (for example, speculators over exporters). The Greens advanced a related criticism, reflected in the increase in collocation of *economy+Zealanders* in this term, by contrasting the economy National was advancing, which they claimed privileged a few, with an *economy that works for all New Zealanders*.¹¹⁷

The collocation *economy+big* increased in usage for speakers from Labour and this was highlighting *big issues/challenges/problems* that require proportionate responses from government and this helps express a major crux of disagreement between National and Labour. National, while taking credit for positive assessments of the economy, justified their interventions as non-interventionist in providing a good environment for businesses and argued that this grounding for the economy would produce emergent benefits in terms of growth and jobs. Labour, on the other hand,

¹¹⁷ There were a number of variations of this, but variations emphasised *all New Zealanders*.

were again arguing that National was not active enough in addressing the economy's problems and where they were being active this was not the right kind of action.

In addition to this ongoing conflict, there were clearly differences between what constituted a *productive economy*. When Labour and Green MPs said *productive* with *economy* it was not to dispute the desirability of productivity but rather to question or criticise government action and inaction in relation to a productive economy and to contrast a productive economy with various characterisations of the non-productive economy that the National government was encouraging. Specifically, they suggested that National was encouraging non-productive speculative economic activity. For the National MPs there was a shift, with *productive* became much more closely aligned with business generally rather than exporters specifically. The productive parts of the economy, businesses, should grow and the non-productive parts, now primarily the government sector, should take a much smaller role. In essence, National MPs modified their use of *productive* with *economy* in the context of arguments for more austere budgets and policies intended to advantage businesses.

5.5.2.3 The 51st Parliament: the *strong economy* and its discontents

Use of the *economy+stronger* by National MPs decreased after the 49th parliament, but they increasingly referred to the *economy+strong* over the course of the 49th, 50th and 51st terms.¹¹⁸ By the 51st parliament National were using *economy+strong* in similar proportions to Labour in the 48th parliament and, as with Labour, and as illustrated by the sample concordance in Table 5.24 this was typically in the form *strong economy* or with *strong* modifying *economy*.¹¹⁹ This emphasis on the *strong economy* is a good way to frame a number of changes in the rhetoric of National party speakers, in particular their tendency to celebrate a number of positive qualities of the economy through the 51st parliamentary term.

¹¹⁸ As a reminder to the reader the analysis of the 51st parliament is not for the full term but until the end of March 2016.

¹¹⁹ That is, that 6.5% of the time Labour speakers mentioned *economy* in the 48th parliament they did so with *strong*, compared to 6.4% of National speakers in the 51st parliament.

Table 5.24 Concordance of National MPs mentioning *strong* in context of *economy* (10 random rows)

21/10/14	National	Simon Bridges	tinues , but there is more and better to come : a <i>strong economy</i> , better public services , and a clean e
11/11/15	National	Hekia Parata	We have a <i>strong economy</i> -- -LSB- Interruption -RSB-
21/07/15	National	Steven Joyce	y , but the good news is that New Zealand has a <i>strong</i> and diverse <i>economy</i> as a result of the confiden
21/05/15	National	Anne Tolley	This will deliver some of the rewards of a <i>strong economy</i> directly to New Zealand 's lowest-inc
01/12/15	National	Bill English	x revenue from a growing <i>economy</i> and from a <i>strong</i> focus on the quality of spending .
22/07/15	National	Matt Doocey	that that is because we have a strong <i>economy</i> , <i>strong</i> economic growth , and strong economic manag
27/05/15	National	Parmjeet Parmar	A <i>strong economy</i> is important if families are to flourish
04/06/15	National	Nick Smith	's oceans are sustainably managed to support a <i>strong economy</i> and the natural environment as well a
21/05/15	National	Bill English	ver time through tight control of spending and a <i>strong</i> focus on value for money .
26/05/15	National	Michael Woodh	g to this country for the job opportunities that a <i>strong</i> , growing <i>economy</i> will have .

As in the previous parliamentary terms National had been in government, there were increases in the collocates *economy+received*, *economy+reports*, and *economy+outlook* and the increased usage was characteristic of question time and primarily questions that allowed ministers the opportunity to draw attention to positive attributes of the economy. Talk of these positive attributes was a feature of question time and other kinds of debate in the house. Arguably the most important was indicated by the increased use of *economy+growing* often as *growing economy* or *economy is growing*. There was also increased use of *economy+percent*, the increase primarily due to increased mentions of GDP growth in percentage terms as evidence of a good economy.

However, there were other positives that speakers pointed to. National MPs increased their use of *economy+inflation* to celebrate the opportunities of *low inflation* (often in relation to the advantage of low inflation for wage earners). In addition, speakers from National increased use of the collocate *economy+rates* and this primarily reflected *interest rates* that were *low/lower*. Both *interest rates* and *inflation* were often compared with higher rates under the previous Labour government as evidence of a good economy and National's economic management.

Challenges to National's *strong economy* began early in the 51st parliamentary term. Speakers from both National and Labour increased their use of *economy+dairy* and *economy+prices* markedly and these collocates reflect an increase of the noun-phrase *dairy prices* in relation to *economy*. In late 2014 world dairy prices halved from record highs at the start of the year (New Zealand Treasury, 2014), however, as with the financial crisis, parliamentarians were not simply reporting and discussing responses to the problem facing a significant industry. Speakers from Labour attempted to

problematised the National government's previous agency with respect to the economy, the kind of economy that National had encouraged, which advantaged certain sectors, including dairy farmers,¹²⁰ and the robustness of National's growth economy. In contrast, speakers from National emphasised that their economy was robust enough to withstand temporary problems for individual sectors, even important sectors. As one speaker from National asserted: "... I am happy to report that we actually have a very strong economy, well beyond dairy" (*Simon O'Connor, NAT, General Debate, August 12th, 2015, NZPLC# 375751*).

Against a backdrop of National speakers' repeated assertions of a *strong economy* (in the various guises already discussed), MPs from both Labour and the Greens attempted to criticise and problematise qualities of National's economy. Labour speakers increased use of the collocation *economy+surplus* and criticised National's failure to achieve the fiscal surplus that the National party had promised in the 50th parliament. As in the 50th parliamentary term, Labour speakers used *economy+exports* more, and, as in the previous parliamentary term, this was to criticise the failure of the National government to encourage the export sector and achieve their stated goal of increasing export output as a proportion of overall economic output.¹²¹ The Greens increased their use of the collocation pattern *economy+everyone*, questioning, as they had done in the previous term by the use of *all New Zealanders*, whether the benefits of National's economy was widely shared. The collocation pattern *economy+everyone* was most commonly used with the verbs *working* or *works* to question or assert the collective benefits of the economy, for example: *an economy that works for everyone* or *an economy is not working for everyone*. The Greens also increased their use of the verb *reduce* with *economy* and this was to highlight a variety of problematic aspects of the economy that the government was not addressing (e.g. *emissions, inequality, pollution, the impacts of child poverty*). The Greens also highlighted problems related to *housing* and although Labour highlighted

¹²⁰ The National party has historically been closely associated with the farming sector and interest groups representing farmers.

¹²¹ The increase in the collocation *economy+percent* for Labour speakers was mainly related to Labour speakers drawing attention to the National party goal for exports as a percent of GDP and the actual, lower level of exports in percentage terms.

housing as a problem, they were less likely to connect this directly to the economy. The Greens, in contrast, problematised the kind of *economy* that did not meet basic needs of people.

During the 50th and 51st parliamentary terms Labour and the Greens were critiquing National's economy, the shared-ness of benefits and specific problems they argued were related to National's economic programme. National, in turn, were increasingly praising the success of the economy and attributing this success to their programme to justify their ongoing programme and position as managers of the economy. Given an economic programme that was oriented to businesses and aimed to achieve a fiscal surplus, speakers from National explicitly justified their programme as successful beyond the immediate beneficiaries of government action and beyond a few economic indicators. Beginning in the 50th parliament and continuing into the 51st parliament, speakers from National were increasingly using *economy+families* in collocation, arguing that *families* were key beneficiaries of National's *growing economy* or *strong economy* through the mechanisms of work and specific government policy enabled by the *strong economy*. For example:

We are also building a more productive and competitive economy to support more jobs, raise incomes, and build opportunities for all New Zealand families, not just people in Auckland or Dunedin—it is not just about one specific area; it is about all of New Zealand.

Melissa Lee, NAT, General Debate, May 6th, 2015, NZPLC# 387611

National is focused on supporting families, whether it is increasing paid parental leave, whether it is extending free GP visits, or whether it is helping more Kiwis to get into their first home. We are focused on increasing our exports and growing our economy, but we do that so we can better support Kiwi families. We are still focused on what matters to New Zealanders.

Louise Upston, NAT, Debate on Prime Minister's Statement, February 10th, 2016, NZPLC#361081

That is what happens when you have got a Minister of Finance who understands families and who understands how an economy works: you can have a Government that is working hard to ensure that all of these pieces of the jigsaw fit together to make a country that works hard and that is delivering the kinds of outcomes that New Zealanders want.

Jono Naylor, NAT, Support for Children in Hardship Bill — First Reading, May 21st, 2015, NZPLC#385191

I want to get back to talk about how improvements to the economy are making life significantly better for our families in New Zealand. I want to start firstly with interest rates. We are seeing interest rates—and I guess it is a great surprise to some—in a position now that is making a significant difference to

young families throughout New Zealand. It is making a difference to business. It is certainly making a difference to the farming community in my electorate.

Ian McElvie, NAT, General Debate, March 18th, 2015, NZPLC#392021

National MPs argued that the *strong economy* would not only deliver benefits for hard-working citizens, but was the answer to social ills identified by their critics, like child poverty, inequality and housing.

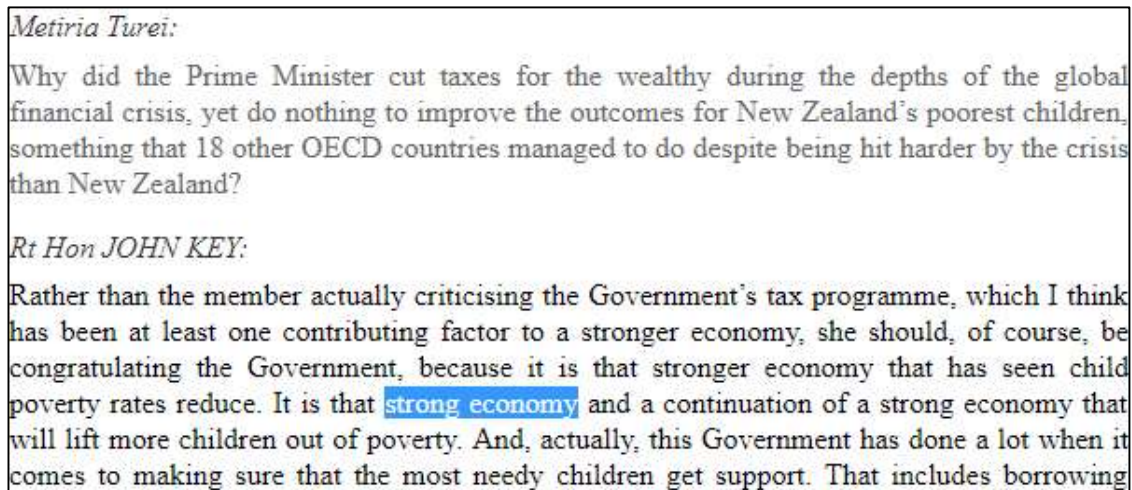


Figure 5.6 Question from Metiria Turei to John Key during Question Time, October 29th, 2014

As the exchange between the Prime Minister and Metiria Turei, co-leader of the Greens, in Figure 5.6 illustrates, National MPs argued that government action for the economy was optimal and that the economy and wider society would be advantaged (and were already being advantaged). This justified a continuation of the government's programme, problems would be addressed directly by the strong economy, and this strong economy would allow the government to engage in more substantial efforts to address problems directly.

5.6 Discussion: bringing together the findings in relation to common features of the rhetoric of the economy

This study reported in this chapter aimed to identify common features of political rhetoric related to the economy. The analysis of the 49th, 50th and 51st parliaments demonstrates changing debates and strategies by political parties related to the economy, and in doing so indicates the nature of ongoing

disagreements as well as common assumptions and appeals. In the following sections I briefly discuss key regularities identified from this study of political rhetoric of the economy.

5.6.1 An orientation to the government's economy

During the analysis I pointed out the degree to which *economy*-talk was nation-talk. But, because it is nation-talk, it is also implicitly government-talk as governing is justified and criticised in relation to whether they are acting to advantage the nation, which the economy is closely implicated with. In terms of the rhetoric of political parties in parliament, the economy is the government's economy in a number of routine ways. The collocation of *economy* and *government* is a frequent and recurring feature of economy-talk. There is also a detectable level of ongoing questioning and negation aimed at governments from the opposition. It is revealing that economy and government are not easily separable, indeed the government's finances were an important way that speakers evaluated and contested the economy and were even conflated with the economy (e.g. *get our economy back into surplus*). It is important to reaffirm that the context of these speeches was New Zealand's parliament and as an institution it is oriented towards government, including scrutinising the government's actions and debating a legislative programme that is primarily initiated and controlled by government. However, this does not explain the routine use of nature of this association.

Key argumentative appeals and disagreements related to the economy in parliament are related to the government, the role of government and the actions of government. In the 49th parliament debates about government action, and the appropriate kind of action, were crucial, as were claims about the responsibility of the previous Labour government and current National government for the poor state of the economy. The analysis of the 49th parliament also demonstrated how the degree of control governments have over the agenda of parliament gives them control over the agenda in relation to *economy*-talk. National MPs prioritised the economy in their justifications for action and rationale for governing, and other parties contested this account. Even National's goal of making government smaller, justified as action for the economy, involved government action, in part to undo policies by the previous government and limit and cut spending: even an undoing is a doing. Debates

about the qualities of the economy as a reflection on government and their programme of action continued through the 50th and 51st parliaments.

There were additional findings that indicate specific kinds of arguments and debates that emphasise the actions of government and the economy as grounds for challenging the government's right to govern. Firstly, in relation to the actions of government, during the National party's term in government a set of actions were justified in relation to the economy as the government's *economy-programme*.¹²² This programme was labelled (i.e. *stronger economy, more competitive and productive economy*) and became the locus of conscious sloganeering and messaging. It should be noted that this programmatic appeal was not distinct to National, during the 48th parliament Labour commonly used the words *knowledge-based* and *innovative* to label their *economy* (e.g. *supporting an innovative and creative knowledge-based economy*). Although here I am emphasising governments and their programmes, opposition parties also conceived and named their programmes (e.g. The Greens' *smart Green economy*). These constitute appeals by political parties to transformative change in the economy. These programmes of action for the economy indicate key differences between political parties and differentiate their imagined economies.

Secondly, speakers in parliament clearly orient to the economy as a way for opposition parties to challenge government and for members of the governing party to praise government. Again, it is important to acknowledge that in the context of New Zealand's parliament there is an institutional imperative to engage in linguistic action to scrutinise the government and their actions and party politics more generally is oriented to an agenda initiated by governments. There appears to be constant disagreement about the state of the economy, what is attributable to government action, and whether the success and failure of the economy is something the government is responsible for. Speakers from all parties tried to align responsibility for the economy with current or previous government. In the 49th parliament National MPs juxtaposed the economy National was trying to create with that of the previous Labour-led Government and in doing so they problematised

¹²² This has much in common with older usages of *economy*, which, based on my readings of budget speeches in the New Zealand parliament in the 1920s and 1930s, was commonly an appeal of responsible government encompassing coordinated actions oriented to economising.

government spending and the size of the bureaucracy. They argued Labour had exacerbated the problems of the recession and this therefore justified the scope of National's proposed action. In contrast, later in the term, speakers from Labour argued that the problems of recession could be attributed to National's response (or lack of response). In subsequent terms, to challenge the National government, opposition parties critiqued the economy by attributing problems to action or inaction by government. Government speakers also used question time and their opportunities to speak in parliament more generally, to cite favourable statistics and reports¹²³ to cheerlead and take credit for the successes of their economy as evidence for the success of their government and its programme.¹²⁴

A key point that follows from this discussion is the dialogical quality of the economy: each political party's economy is established and justified in relation, or in counter-relation, to other parties' economies. As the analysis demonstrated, this dialogical quality was evident in the way National established the rationale for their economic programme by problematising Labour's economy early in the 49th parliamentary term (e.g. *towards* and *away from*) and the constant reference by all parties to other governments (current, previous or alternate) throughout the three terms. This dialogical quality was evident in recurring phrasings that reference the rhetoric of opposing parties, for example: *stronger* for National MPs, *step change*, *turbocharge* and *productive* for Labour MPs, *smarter* and *rebalancing* for the Greens. Likewise, the Greens' appeal to an economy *for all New Zealanders* or *for everyone*, as much as these were used in attempts to articulate the Greens' good economy, this was appealing to criticisms of the unequal benefits associated with National's economy. The analysis indicated that speakers were critically orienting to government action with respect to the economy and the economy as a way to contest the right to govern.

¹²³ Announcements about statistics and reports are routine practices of parliamentary politics that give weight to economic expertise. The most banal of these, for example stating GDP growth rate or inflation rate when they become available, become evidence in debates between political parties. The ideas and assumptions behind these statistics are largely incidental to the debate.

¹²⁴ Even in the situation, as it was during the 49th term, where there were few positive results to report, the routine reporting of these results was a way of indicating predictability and control in a problematic situation and the responsibility of government in attending to them.

5.6.2 Evaluating the economy: the assumption of growth and challenges the growth economy

A key finding of this chapter is the predominance of growth when parliamentarians are talking *economy*. The analysis of key collocates further revealed the assumption of the goodness of growth as pervasive and appeals to growth as a common feature of the rhetoric of the two major parties. The desirability of growth is an assumption embedded in the arguments of the major parties and rarely interrogated, except by the Greens. This desirability of growth has important implications for governments: governments should act in pursuit of growth; growth provides a means to assess governments. Speakers from National and Labour demonstrated these assumptions about economic growth, but they also directly appeal to growth to bolster arguments in parliament. The analysis of key collocates also revealed the dynamics through the crisis and how both National and Labour positioned the return to growth as the key priority in the context of crisis. When the economy was not growing speakers' arguments assumed the need to grow the economy. The implication of this is that there are normative ways to evaluate the economy and that growth is the dominant norm of the rhetorical economy. The growth norm and normative evaluations more generally are crucial in understanding political rhetoric related to the economy.

The appeal to the amount of growth using quantitative measures (GDP growth rates expressed in percentage terms) was a common feature of the rhetoric of both National, in celebrating growth statistics as achievements of their government, and Labour, in demanding action for growth in a recession. In this attention to growth in quantitative terms the economy was closely related to a measure of economic output (GDP), but this measure was frequently absent from debates and it was the economy itself that was growing. A feature of political rhetoric was the frequency with which this quantitative realisation of the economy, an aggregation of output, was reified as the economy itself. However, within a rhetorical context that assumes the growth economy as the norm and in a historical period typified by positive growth in GDP, the economy was still evaluated and contested.

I suggest that the key move in challenging these quantitative assessments of the economy, both in criticising a growing economy and defending a non-growing economy, was to interrogate and

appeal to qualitative dimensions of the economy. Speakers did this by introducing other quantitative and qualitative assessments of the economy. Labour MPs, for example, challenged National's economic management because despite a growing economy National had failed to achieve a fiscal surplus. Furthermore, speakers from both National and Labour problematised the nature of and causes of growth and whether this was attributable to the government (e.g. relating growth to problematic speculative activity or too much government spending). Speakers also appealed to qualities of the economy that were not captured by growth measures (e.g. who was benefitting, environmental problems, whether jobs were sustainable). A further qualitative challenge to evaluations of the good and growing economy was the appeal to problems.

Problems were important topics of debate in the period analysed. The analysis of the 49th parliament and the 51st parliaments, in particular, revealed MPs speaking about problems for the economy, a crisis, a recession, unemployment, dairy prices, housing, as problems for the polity. However, parliamentarians were not primarily reporting on problems and there is little evidence that speech in parliament was an attempt to reach some common understanding of these problems in order to deliberate about appropriate solutions. There was considerable contestation of the nature and causes of problems and the kinds of action that were necessary in relation to them.

However, problems were also a key strategy to legitimise government action and to challenge the government's economy and to challenge a growing economy. National MPs justified the government's programme in the 49th parliament by pointing to the problems of Labour's economy that had exacerbated the crisis; Labour MPs challenged the appropriateness of the new government's programme, the government had *no plan* in a situation that required urgent, bold and direct action; later in the 50th and 51st parliaments opposition parties challenged the goodness of National's economy. The debt-fueled property speculation that National problematised as the basis for growth under Labour in the 49th parliament, was likewise problematised by Labour from the 50th parliament to challenge the nature of growth and an economy that benefitted a few.

The key point from this discussion is that there is considerable contestation of the economy. There are specific goals of this related to challenging the government's economy and legitimise or argue for action. Studying party politics related to the economy indicates that this contestation is constant and follow from the roles and responsibilities of government with respect to the economy. I suggest though that this is not just an outcome of party politics or parliamentary democracy, but the deeply political and qualitative nature of the economy.

5.6.3 Disembedding and embedding the economy: fundamental rhetorical moves

As was discussed in Chapter 3 (see Section 3.5), the use of *the economy* has been the subject of previous critique, with researchers explaining the origins and the increasing use of *the economy* since the 1930s and problematising the extent to which the economy is treated as a distinct and separate entity imparted with a life and agency of its own in public discourse and an object used to justify government action (Mitchell, 2011; Schabas, 2009; Emmison, 1983; Hope, 1991; Rae & Drury, 1993). Beginning in Section 5.5.1.2, the analysis of parliamentary rhetoric indicates there is additional complexity that can be added to this account.

Firstly, there is a kind of rhetorical appeal identified by Emmison (1983, pp. 153-154), which is to appeal to an independent and separate economy that is “on no one's side”. There was evidence in this study of appeals to such an independent and separate *economy* for justification. This was perhaps most notable in statements about what the government was going to do *to grow the economy*, which is frequently offered as self-justification. There were also examples where speakers appealed directly to this kind of conception, for example:

I was talking to a top economist just last week. He said to me that doing a good job by the economy comes down to two things. [...] Firstly, it comes down to spending less and having less debt. [...] Secondly, it comes down to building a more competitive and productive economy.

Simon Bridges, NAT, Address in Reply, February 14th, 2012, NZPLC# 332848

Here Bridges appeals to the economy of the economist, but also his party's programme for the economy, and each are in their own way abstracted realisations of a separate economic sphere.

We can understand that this as an example of a general kind of rhetorical move by speakers to appeal to the independent, separate *economy* for justification. I am going to refer to this as a rhetorical move of *disembedding*: an appeal to the separateness and independence of the *economy* to justify arguments. The use of *disembedding* signals that this is an active rhetorical strategy, something someone is *doing*. This obviously draws on terminology that Polanyi (1944/2001, 1957a, 1957b) introduced, which I discussed in Section 3.5, when making the distinction between an *embedded* and *disembedded economy*. As discussed in Section 3.5, Polanyi raises the distinction to describe and elaborate the emergence of a separate economic sphere conceived in terms of the self-regulating market not just in terms of its separateness. It should be noted that neither Emmison (1983) nor Polanyi use “disembed” to refer to an argumentative strategy in the way I am proposing. I am using *disembedding* here in a form that is not restricting to market-based ways of imagining and representing the economic sphere, but instead as a more general kind of appeal to *economy* as a sphere of knowledge and action that is distinct to society or the natural environment. This can encompass the market economy, but also the growth economy or the party’s economy as described in the previous sections.

Opposing this *disembedding* move, however, I am proposing a related *embedding* move, manifest in recurring features of *economy*-talk. This embedding move is to emphasise the inter-relatedness and implicatedness of people. I am suggesting the power of the economy as a political object is this ability to ground abstract economic reasoning and ideas and to implicate people through appeals to the collective prosperity and welfare. How is this done? I am proposing three key ways that could be detected in the analysis. Firstly, there are various ways that the economy was linked to people, this included National’s use of *families*, the Greens’ use of *everyone* and all parties’ appeals to *New Zealanders*.

Secondly, there were constant appeals to the nation both explicit (*New Zealand economy*, *New Zealanders*) and subtle (e.g. *our economy*). This is not to say the nation is not an abstraction, but as the literature on nationalism demonstrates the nation is a fundamental and profound way people understand their interrelatedness, their connectedness, their similarity to others, and situate themselves

in a world inhabited by nation-states (Anderson, 1991; Hobsbawm, 1992; Billig, 1995). The use of the definite article to presuppose existence, *the economy*, is therefore more complicated than a problematic appeal to an abstract socially constructed sphere. Although the use of *the economy* was much more common, speakers regularly used *our economy* to emphasise the project of the collective good. The use of *the economy*, as much as it could presuppose a separate sphere, appears also likely, through the constant overt signalling of the nation, to presuppose *the nation's economy*.

Thirdly, there were frequent appeals to *jobs*, particularly in the context of financial crisis and recession.¹²⁵ In the context of the political rhetoric during the period analysed, *jobs* was especially important as it was used as a proxy for growth and a key way that the growth economy was justified as advantageous for the collective. Often *jobs* and *growth* are connected, sometimes just as *growth and jobs*, for example as the dual effects of government action, but it was also clearly assumed that *growth* would result in *jobs*. Arguments connecting economy, nation, growth and jobs have a history in New Zealand and these ideas resonate with a distinctive form of liberal argument originating in the nineteenth century that rationalised collective action by an active state in the interests of enhancing the economic freedoms of citizens (Vowles, 1987). This idea has been a recurring feature of New Zealand political thought, allowing the leaders of Labour to justify creating the welfare state and National to justify retaining it. More recently, Ministers of Finance in 1984 and 1991 each justified the speed and scope of the radical reforms they initiated in terms of nation, growth and jobs (Douglas, 1984; Richardson, 1991). A more specific version of this general argument can be discerned in the consensus Paul Dalziel (1989) describes at the 1984 Economic Summit Conference (held after the Labour Government was elected) between representatives of business, labour, primary producers, and community groups. This consensus, centred on the problem of unemployment caused by low growth, provided a rationale for reform. The fourth Labour Government and subsequent Governments have justified programmes of radical structural change, as well as specific policies, as measures to realise an economy conditioned for growth. Governments have argued that it is growth that would deliver to citizens the prerequisite or opportunity to realise their economic freedom. That is a job.

¹²⁵ It should be noted that in the context of *economy* speakers who mentioned *new Zealanders* were three times more likely to mention *jobs*.

5.7 Summary

This chapter aimed to identify common features of political rhetoric related to the economy by using corpus methods, primarily by comparing political parties use of the word *economy* across time in New Zealand's parliament and analysing patterns of use revealed by these comparisons. Preliminary quantitative analysis indicated that 2008 marked a dramatic increase in use of *economy* and subsequent analysis concentrated on the parliamentary terms from 2008. The financial crisis looms large in explaining this increase, with political parties debating the appropriateness of government action in this situation, but I suggest that the large increase is related to the arguments that National was presenting for their programme of change.

Analysis grouped the key findings in relation to three regularities. The first two were based on key assumptions that connect to specific kinds of argumentative appeals and disagreements. The third indicates fundamental rhetorical moves of political rhetoric related to the economy. Firstly, analysis revealed nation, government and economy are closely linked in the rhetoric of political parties in relation to the economy. Associated with these shared assumptions about the nation and the roles and responsibility of government were related appeals to the economy as a signifier of the collective good as a way to justify action by the state and the government's continued right to govern.

Secondly, the analysis also quantified, as a distinct feature of the rhetoric of National and Labour, the pervasive assumption that the economy should grow and how this represented a key difference with the Green party. Speakers from the major parties represent economic growth as good as an end of government action and good as a way to produce other positive results (e.g. more jobs). This assumption is a key difference between the major parties and the Greens, who problematise this growth assumption and contest ideas of unlimited material growth. However, that the economy is growing is not to say that these evaluations are not contested. Analysis indicated speakers contested claims about a growing economy by appealing to qualitative dimensions of the economy. Analysis revealed that speakers were engaged in an ongoing and fundamental struggle to contest and problematise the economy.

Thirdly, in addition to a rhetorical move to disembody the economy, positioning it as an independent driver of government action, there is a contrasting, but arguably related, embedding move. This embedding move represents the economy as a way to imagine the inter-relatedness and implicatedness of people. This is manifest in constant appeals to the nation, to people, and to *jobs*. I highlight *jobs* as a key way in which the idea of *growth* is justified.

This analysis has identified regularities related to the rhetoric of the economy in New Zealand's parliament and the deeply contested nature of the economy. The specific problems and disagreements identified indicate the argumentative context, at least in relation to prominent disagreements between political parties, for the study reported in Chapter 6. I make more explicit connections between these findings for our understanding of lay people's thinking about the economy in Chapter 7.

This chapter has made two key contributions to the wider thesis. These will be discussed in more detail in Section 7.3.1, but I will raise them briefly here. Firstly, the annotated corpus of debates in New Zealand's parliament, the NZPLC, which was developed for this study is a data-set that has relevance for political scientists (and linguists and other social scientists) to better understand parliament as an institution and how it functions, what is being said in parliament, and the ideas of political parties. Although *Hansard* is available online in a searchable form, research of the kind reported in this chapter is not possible without an annotated corpus. The annotations of the corpus and the corpus software also allow more powerful ways to interrogate the parliamentary record, which has relevance for historians and legal scholars who use *Hansard* regularly. Since there are other corpora available for other parliaments, there is also the potential for comparative research on parliamentary discourse and the institutions themselves. Secondly, the key collocates procedure is novel in identifying and analysing patterns of arguments. The results of the quantitative analysis have identified meaningful patterns that were subjected to in-depth analysis. This analysis revealed strategic use of *economy*-talk by political parties at specific points in time for specific purposes and aids in understanding the kinds of disagreement in parliament. This has relevance for analysing other political texts and other kinds of argumentative discourse (for example, newspaper editorials).

Speech in New Zealand's parliament, and specifically the rhetoric of parliamentary parties, is under-researched and has not been researched in this way before. The study reported in this chapter revealed how three political parties in New Zealand's parliament differed in their *economy*-rhetoric. While this research can only be indicative of wider debates in parliament and the ideas and strategies of political parties, the study highlights the value of systematic analysis of what representatives are saying in New Zealand's parliament.

Chapter 6 A corpus-assisted study of the rhetoric of the economy on talkback radio

6.1 Introduction

The last chapter described a corpus-assisted study of the rhetoric of the economy in New Zealand's parliament and revealed regularities related to the use of the economy in debates between parliamentary political parties. In this chapter I describe a corpus-assisted study of the rhetoric of the economy “in the wild” of talkback calls.¹²⁶ As discussed in Chapter 3 and Chapter 4, rather than eliciting self-reports, which risks reproducing previous assumptions about the nature of lay theories, in this study I analysed talkback calls to observe people using *economy* as it emerged during their interactions. As in Chapter 5, the study described in this chapter aims to identify common features related to the way *economy* is used by callers and hosts, including common assumptions, common patterns of argument, and common points of controversy.

The “lay people” in this study are people speaking on talkback radio calls. A recent primer on the use of talkback calls for qualitative research observed that despite the potential of talkback radio as a data source, it was “underutilised” (Hanson-Easey & Augoustinos, 2017, p. 160). This study addresses one difficult aspect of using talkback calls identified by Hanson-Easey and Augoustinos (2017), which is the finding calls on relevant topics is not straightforward. To capture these talkback calls I recorded 1788 hours of talk radio on two nationally broadcast New Zealand radio stations, *Newstalk ZB* and *RadioLive*,¹²⁷ from 14 February to 31 March 2016. I developed a novel approach,

¹²⁶ Talkback calls have also been referred to as “radio phone-ins” in the academic literature (for example, see: Hutchby, 2001, p. 481). I use *talk radio* to refer generally to the radio format that typically features people talking about current affairs and *talkback* or *talkback radio* to indicate a subset of talk radio that provides the public with opportunities to phone the radio station to talk with the host, live on the air, about matters of interest or concern.

¹²⁷ See Section 4.5.1 for discussion of legal and ethical issues related to building and analysing the audio corpus based on talk radio broadcasts.

that is described in this chapter, that facilitates capturing many instances of the word *economy* from audio data, and software which allows the immediate context to be manually transcribed for closer analysis of the utterances and the immediate interactional context. The mechanics of this approach, which could be reproduced in other discourse-oriented research, is a significant contribution of this chapter. While it is increasingly common to use corpora to study discourse of various kinds, by far the most common type of language is written language (Reppen, 2010; Ädel, 2010; and other relevant chapters in: O'Keeffe & McCarthy, 2010). When spoken language is used it is first fully transcribed. The resources required to transcribe this spoken language affects the scale of spoken corpora that can be built. In this study I treat the digital recordings of the audio, without prior transcription, as the corpus. In doing so, I examine the necessary steps in conducting research on an audio corpus that are analogous to the kind of analysis performed on a text corpus. Given the novelty of this approach, in Chapter 7 I evaluate this new method as a contribution of the thesis and discuss its relevance for other discourse-oriented research.

6.2 Background

I know that the leader of the Labour Party listens to the people's Parliament every week. She listens to **the people's Parliament** broadcasting across God's great garden from the golden microphone in the palace of arrogance. [...] My advice to the leader of the Labour Party is that if she wants 400,000 New Zealanders to get her message on a Sunday morning, she, too, can leave a vast footprint across this nation. **She, too, can run the people's Parliament. She, too, can dial into democracy.** But she will not last long because only people with some justice and something important to say last long.

(Banks, 1995)

Recalling that the previous study specifically addressed speech in parliament, the quote above, from an MP speaking in parliament, is interesting because it contrasts parliamentary politics with the extra-parliamentary politics of talkback radio and, in so doing, introduces important dynamics of talkback radio that are discussed in more detail and related to the literature in this background section. On the one hand, talkback is portrayed by Banks as belonging to the sphere of “the people” and a deliberative forum, “the people’s Parliament”, which is focused on the speech of everyday people in contrast to the lofty and elite arguments of an out-of-touch leader of a parliamentary party. Banks claims talkback allows citizens the opportunity to “dial into democracy” to participate directly in the debates

of the polity. On the other hand, this excerpt indicates that talkback radio is a specific kind of institutional talk with characteristics that need to be acknowledged. Implicit in the statement, “only people with some justice and something important to say last long”, is tacit acknowledgement of the role of the host, as gatekeeper and judge of the content of callers’ speech, as well as the nature of the talk radio format, which aims to profit by creating and entertaining an audience. Also, Banks indicates that talkback is a form of communication via mass media with a large, live and direct audience (“400,000 New Zealanders”). What is not stated in the excerpt is that the speaker, John Banks, a cabinet minister under the National government, was also a talkback radio host at the time of this statement. This exemplifies a longer history of problematic boundaries between talk radio and political interests and manipulation of the medium by politicians in New Zealand (McMillan, 2016).

In this section, I first explain the relevance of the use of talkback in this research to gain insights into lay people’s thinking. This requires addressing whether it is appropriate to treat talkback as an example of “naturalistic” discourse, whether we can straightforwardly treat speakers on talkback as “lay people” and whether the nature of talkback radio interactions matter for this research. I then address what we know about talk radio in New Zealand and the two radio stations and their audience.

6.2.1 Why talkback radio?

In setting out my theoretical and methodological “in the wild” reorientation in Chapter 3 and Chapter 4, I drew on the arguments of discursive psychologists (Potter & Hepburn, 2005) and suggested that there was potential for new insights from studying speech data that occurred without the researcher’s intervention or organisation. This was particularly important given the potential for assumptions of previous research to be reproduced when the researcher elicited and structured people’s self-reports. Whether talkback radio can be considered “naturalistic”, according to Potter and Hepburn (2005, p. 301), rests on whether “the activity being recorded would have happened as it would have anyway”, and so was “not got up by the researcher”. In the case of talkback radio, the researcher plays no role in specific interactions between hosts and callers and the broadcast happens regardless of whether it is being recorded by the researcher or not. Talkback radio has been used in a number of studies that

adopt the analytical orientation of discursive psychology (For example, see: Hanson-Easey & Augoustinos, 2011, 2012; Hanson-Easey et al., 2014). Precedent does not by itself warrant using talkback data uncritically in this instance and in questioning the distinction between natural and contrived data, Goodman and Speer (2016, p. 57) suggest considering “what the researcher wants to do with it and what consequences the interactional setting has for the phenomenon being analysed”. These are connected issues, which can be reframed as a question specifically related to this research: Why are talkback radio calls an appropriate source of data for studying lay people’s use of the economy? I respond to this question in the sections that follow.

6.2.1.1 Talkback as spontaneous, interactional, and topic-rich

Talkback radio provides the opportunity to observe people using *economy* in a situation in which people are spontaneously interacting in dialogue. In other words, talkback calls allows the opportunity to observe “people’s talk as it manifests in real-time communication and the endlessly fascinating ways speakers formulate and adapt their talk contingent on the interaction at hand” (Hanson-Easey & Augoustinos, 2017, p. 161) or, in keeping with the theoretical setup in Chapter 3, to observe people “arguing and thinking” (Billig, 1987). In emphasising that talkback is interactional, it should be acknowledged that it has been common in previous studies to emphasise the conversational qualities of talkback, which is perhaps not unrelated to the prevailing use of conversation analysis in previous research (Bednarek, 2014, p. 5).¹²⁸ However, as Bednarek (2014) demonstrates, despite the lack of corpus-assisted research on talkback radio, corpus methods can be fruitfully applied to study features of talkback dialogue. I am not aware of any studies that use corpus methods to engage with the ideological content of talkback calls.

Given that the intention of this study is to examine examples of language use to gain insights into lay people’s thinking, talkback radio broadcasts certainly allows a researcher to access and record people debating a range of topics. As Hanson-Easey and Augoustinos (2017, p. 149) point out, “a key strength of TR [talkback radio] is the diversity of topics, views and rhetoric pervading this media”.

¹²⁸ Note, that Bednarek (2014) does not make this link explicitly, but likewise is interested in understanding how talkback dialogue is conversational using corpus methods.

With talk radio broadcast 24 hours a day, much of this featuring talkback calls, it offered the opportunity to capture many instances of people using *economy* even if this was relatively rare in the context of calls.

6.2.1.2 Who speaks on talkback calls?

With respect to the people speaking on talkback calls, a crucial question is the appropriateness of treating the speakers on talkback calls as *lay* people. Scholars have already suggested the applicability of talkback to study “lay opinions” (Hutchby, 2001, p. 481), “lay theories” (Hanson-Easey et al., 2014, p. 362), and “lay representations” (Hanson-Easey & Augoustinos, 2017, p. 153). Likewise, Hanson-Easey and Augoustinos (2017, p. 148), in their discussion of using talkback data for qualitative research, emphasise that talkback offers the ability to observe the “ordinary”, “everyday”, and “people’s lived experiences and concerns”. The assumption that it is “the people”, to borrow the terminology of the parliamentarian-cum-talkback-host (Banks, 1995), who inhabit talkback does not require that we essentialise “the people” though. In trying to understand people’s use of *economy* on talkback is to study an example of a public kind of thinking to gain new insights into public dimensions of thinking that are not captured when we conceive of and study “lay theories” as a private and disciplinary kind of phenomenon.

Thus far, I have glossed over any distinction between callers and hosts in relation to the idea of a “lay person” and I will be using the utterances of both in this study. However, we can and should discriminate between speakers on talkback calls. Hosts are paid to talk, to be opinionated, and potentially to be controversial (Hanson-Easey & Augoustinos, 2017, p. 145). Hosts are often well known public figures and, particularly those in the primetime slots, are likely to be affluent and have had a successful career in broadcasting or politics. Hosts are also likely to be practiced in talking on the radio and talking to callers and, because they constant engage with current affairs, are likely to be knowledgeable with respect to topics being discussed and recognised by callers as such. Hosts can be considered as “politically relevant elites” given their potential to influence the public by setting agendas and shaping the way current affairs is communicated (Mayerhöffer & Pfetsch, 2018, p. 418).

Talkback hosts in New Zealand have a reputation for advancing a conservative and reactionary kind of politics from the “right of the political and social spectrum” (McMillan, 2005, p. 76).¹²⁹

These attributes of hosts indicate a power difference between hosts and callers, however the “asymmetrical power relations” (Bednarek, 2014, p. 5) between hosts and callers goes beyond these obvious characteristics of talkback host’s control of the talkback interaction itself. This begins before a call is broadcast, with the host (and their producer or production team) able to exercise control over the topics to be discussed and which callers get to talk on-air and for how long (Hanson-Easey & Augoustinos, 2017, p. 148; McMillan, 2005, p. 76; Also, see: Ewart, 2016). Once the call begins on-air, as Hutchby (1996, p. 495) has observed, calls are typically structured with callers establishing the topic they want to discuss and indicating the nature of their argument and this affords the host the powerful position of speaking second, with “a set of powerful resources available for dealing sceptically with callers’ contributions”.¹³⁰

While there are differences between hosts and callers, the key point is whether differences are significant given the aim to study lay people’s thinking about the economy. I suggest that these differences are something to attend to, rather than something that negates the usefulness of talkback data in understanding public thinking about the economy. In particular, it is problematic to assume that people in conversation, discussion, debate, or other kinds of speech situations are interacting on an equal footing and that inequality of power and social status are irrelevant when it comes to studying social interaction (Billig, 1999b). Appreciating these imbalances of power, status and knowledge provides the opportunity to use these known dynamics on talkback to think about these issues more generally in relation to lay people’s thinking.

In concluding the background on the people who speak on talkback calls, it is appropriate to re-raise Furnham’s (1988, pp. 221-222) concerns with studying the “self-presentation of lay theories” (see Section 4.2.2) and its relevance for this enquiry. Furnham’s hesitations firstly rested on the

¹²⁹ McMillan, in fact, suggests the lack of research to verify this assumption is that is easily confirmed by listening. However, there are talkback hosts with a range of political views, including some who have been MPs for political parties of the left.

¹³⁰ Hutchby does emphasise that power dynamics between callers and hosts is complex and shifting within the interaction.

problems of representativeness: we cannot know much about the participants and whether we can generalise to the general population¹³¹ *and* we cannot know whether people who get to talk on air are systematically biased by the selection process.¹³² Furnham was also concerned that the researcher could not know *whose self* is being presented, for example in the case where a caller does not disclose that they are calling to advocate for a political interest group. These issues matter if the concern is to produce an accurate representation of the general population or to make strong claims about people's individual cognitions,¹³³ but these issues are not crucial if our aim is to inform a rethink of lay theories by observing unappreciated regularities within the variety of people's use of *economy* in public.

6.2.1.3 Talkback radio as media

In addition to these characteristics of speakers, there are characteristics related to the institutional nature of talkback radio that background this study. There are four issues I will outline briefly. Firstly, the talk radio format is a kind of broadcast media oriented to current affairs. Although we can idealise the news media's role in informing people and holding the powerful to account, the news itself is shaped by who owns it, who advertisers on it, and who it provides a platform for (Herman & Chomsky, 1994; Rudd, 2016). Secondly, talkback radio is qualitatively different from other broadcast news discourse, as Hutchby (2006, p. 99) illuminates:

Talk radio is a media discourse genre that brings into play the potential for a different sense of news and a different relation between news and news audiences than is generally considered in media sociology. On talk radio, laypersons call in to discuss items 'in the news', but not just news as defined by news gathering organizations. Talk radio offers a context in which people can define as news events as they emerge in or affect their own everyday lives ...

The key difference between talkback radio and other kinds of broadcast news formats is, therefore, that it provides the audience the opportunity to participate and shape what is considered newsworthy.

¹³¹ Yes, although we can research the background of hosts through their public biographies and other background material (e.g. magazine interviews or press releases from radio stations), we are blind to characteristics of callers other than what they disclose on calls.

¹³² Tempering this concern though, especially given the perceived conservative orientation of talk radio hosts, in deciding to use talkback radio as a data source I listened to segments and heard a variety of perspectives on issues, including people disagreeing and agreeing with hosts. I also did observe times where the hosts appeared to have no callers awaiting their turn, and hosts appeared ready and very willing to talk about whatever people wanted to discuss in these situations.

¹³³ By this, I include people's motives, other than the presumption that they were motivated to call and that calling represents an "intervention" in some specific debate (Skinner, 2002, p. 115).

Thirdly, talkback is broadcast to someone, implying that there could be a large audience. Again, this moves the talkback interaction away from preconceptions we have about what constitutes natural conversation. While speakers are likely to orient to each other as the immediate audience for their utterances, they must also be aware of the potentially large audience listening to the interaction (Bednarek, 2014, p. 5). Fourthly, the commercial imperatives of talk radio (in the case where it is privately owned), the nature of it as a medium co-created by its listeners, and the fact of the audience, are contextual factors that speakers may orient to. The host's role, as much as act as the recurring interlocutor, is to retain and entertain an audience. The caller is not only saying something about a topic, they are also likely to be aware of the constraints of the format and to orient to these as they talk (Ewart, 2016). These four issues inform this study because the institutional context creates the preconditions for the interaction and prescribes the potential for influence of talkback talk beyond the interaction.

6.2.1.4 The politics of talkback

Talkback radio shows, according to Hutchby (2001, p. 481), “potentially represent the closest thing to an authentically democratic public sphere that the mass media have been able to produce”. But, this idealised democratic potential is constrained by the characteristics I have described. In particular, talkback is the kind of forum that pits members of the public against a recurring representative of a media organisation that operates for profit. While talkback may be understood to create its own public, this is not to say that it represents “the public” in general. Most obviously, if hosts are predisposed to a conservative and/or populist orientation, this may affect how topics are selected and framed (McMillan, 2005).¹³⁴

Whatever kind of forum talkback is, it is significant because it provides the powerful with a means to access an audience to persuade and a way to influence the agenda for public debate (For example on Australian talkback, see: Turner, 2009). This also implies that there is the potential for political interests to manipulate the platform. McMillan (2016, p. 269), for instance, has suggested that talkback is “vulnerable to political manipulation” by “[o]rganised ring-in campaigns by political

¹³⁴ Talkback has been studied precisely as a way to access racist views (Hanson-Easey & Augoustinos, 2017).

and party activists”. Perhaps of more concern, there have been striking examples where hosts have manipulated the platform by advocating for interests they are not disclosing (for example, for discussion of "Cash for Comment" in Australia, see: Turner, 2009, p. 413). This suggests that where hosts are not clear on standards of disclosure and ethical separation between media and those they are claiming to scrutinise and report on, that the ideological orientation of the politically relevant elites of the media and their ties to favoured political elites become salient.

In this section I have examined the relevance of a study of talkback radio against the overall interest of gaining insights into lay people’s thinking about the economy. Studying talkback calls allows us to gather many instances of lay people using *economy* in a speech situation that is dialogical, spontaneous and not created by the researcher. While not “contrived” in this sense, talkback calls are contrived in other ways I have discussed, which should be recognised in interpreting the results of this study. The dynamics between host and caller, while perhaps not matching our expectations of an everyday conversational interaction does create the possibility of considering the dynamics of use of the economy between people with unequal power and authority. I now turn to the specifics of talkback in New Zealand and the radio stations to be analysed.

6.2.2 Research on talkback radio in New Zealand and the two radio stations: *Newstalk ZB* and *RadioLIVE*

The content of talkback radio in New Zealand, like the content of speech in New Zealand’s parliament, has not been a major topic of academic enquiry. A paper by McGregor (1996) aimed to respond to the lack of research on the content of talkback radio in New Zealand and did so by critically examining the quality of reasoning as well as the framing of issues by hosts. A decade later, a paper by McMillan (2005) studied complaints to New Zealand’s Broadcasting Standards Authority (BSA) to examine racist and biased speech on talkback calls, but suggested that the content of talkback radio and its political effects deserved greater attention from researchers. There has not, however, been subsequent research that has taken up this challenge and so what we do know about talkback and talk radio in New Zealand is primarily from academic research on patterns of media ownership in New Zealand (Myllylahti, 2015, 2016) and survey research commissioned by state and

industry agencies on media audiences (Colmar Brunton, 2014; Glasshouse, 2016; GfK, 2016; Nielsen, 2011). In this section I provide background on talkback in New Zealand and introduce the two talk radio stations that were studied: *Newstalk ZB* and *RadioLIVE*.

The two stations were chosen because they were the most prominent, relevant and accessible forums for talkback in New Zealand.¹³⁵ The two radio stations, *Newstalk ZB* and *RadioLIVE*, represent the main talkback stations of rival media companies in the “duopoly of private ownership” of radio stations in New Zealand (McMillan, 2016, p. 265).¹³⁶ *Newstalk ZB*, a part of *The Radio Network*, was in turn owned by media company *NZME*. *NZME* also owns significant New Zealand print and web media. *RadioLIVE* was part of *MediaWorks*, which also operates nationally broadcast free-to-air television.

The two stations have significant audiences. Based on surveys of approximately 1400 people in 2016 *Newstalk ZB* had the largest daily reach at 7% (8% for a comparable survey in 2014) and *RadioLive* had a daily reach of 3% (4% in 2014) (Colmar Brunton, 2014; Glasshouse, 2016).¹³⁷ A larger survey of commercial radio audiences (January 31, 2016 to April 23, 2016) estimated that 398,900 people listened to *Newstalk ZB* on a weekly basis, and it was the second largest cumulative audience for any of the commercial stations surveyed (GfK, 2016). The estimated cumulative weekly audience of *RadioLive* was 192,800 people. This survey also indicates that the audiences of both stations are skewed to older listeners. Interestingly, even in quietest hours from midnight to 6am, when talkback continues to operate, there is a significant cumulative audience across a week (112,500 for *Newstalk ZB* and 38,600 for *RadioLive*).

Most of what we know about people who listen to and call talkback is from a study commissioned by the Broadcasting Standards Authority in 2011 (Nielsen, 2011). In their survey of

¹³⁵ There are talk radio stations that discuss sport and there are radio stations that feature phone-in segments at specific times, however there are no other nationally broadcast 24 hour talk radio stations operating.

¹³⁶ In addition to these two private radio networks there are public radio stations, including the station with the largest daily reach *Radio New Zealand National* (Myllylahti, 2015, 2016). These do not provide talkback radio in any significant form.

¹³⁷ I am also using an audience survey conducted in April and May 2016 for public media funding agency *NZ On Air* (Glasshouse, 2016), which is soon after the point I stopped recording audio for the two radio stations (at the end of March 2016). The 2014 data commissioned by *NZ On Air* as well for reference (Colmar Brunton, 2014).

12,000 New Zealanders over 15, one third of respondents indicated they listened to talkback at least “sometimes”. The one third proportion had been stable in the previous three annual surveys (p. 9). In a subsequent survey, this time of 503 talkback listeners, one third of these listeners claimed to listen “most days” (p. 10). This survey also provided insights into the people who called talkback, indicating that 30% of talkback listeners had called, but only around half of the people calling had made it on air (p. 13). Of those who had called, around 10% indicated they did so on a regular basis, with 23% indicating they had only ever called one or two times (p. 13). The researchers asked the non-callers why they had not called and 72% indicated they liked listening to the discussions and 22% indicated that they expected others with a similar perspective would call (p. 14). The researchers also identified a group of people who listened often and these “talkback enthusiasts” were more likely to be retired males (p. 9) and were more likely to have called. Supporting some of the claims about the usefulness of talkback as a data source with spontaneous dialogue featuring ordinary people, the research suggested that “listeners fully appreciate that they listen to ‘real’ people, ‘real’ opinions, within a live action format” (p. 18).

6.3 Method

In Chapter 4 I quoted the often cited definition of corpus linguistics from McEnery and Wilson (2001, p. 1) as “the study of language based on examples of ‘real life’ language use” and relatedly, that corpora are collections of “examples of ‘real life’ language use”. The norm is that these examples are *texts* and that these are structured in a format that is consumable and manipulatable by available computer software (Gries, 2009; Reppen, 2010). With the exception of research and software tools that focuses on audio and annotations of the audio as the primary data for analysis, for example sociophonetic research using the LaBB-Cat software (Fromont & Hay, 2009; Clark & Watson, 2016), the norm in corpus research, and particularly discourse-oriented corpus research, is that the audio is transcribed and any digital audio data function as annotations of the textual representations.

In this study I departed from the expectation of a corpus as a body of texts, while still adhering to a conceptualisation of corpora that is agnostic about the kind of records that constitute a

corpus. I treated the data contained in the digital audio files themselves as the examples of language use, in this case people speaking in talk radio broadcasts, and the collection of these audio files as a corpus. However, in this case I was not transcribing the audio files. This would not have been feasible with the 1788 hours represented in the final corpus, or indeed even a few hundred hours. However, this left the problem of how to get at the content of the audio corpus as audio precludes the text-based searching that is a basic prerequisite for analysing text corpora.

The problem of how to get at the content of this audio corpus is also relevant to recent comments by Hanson-Easey and Augoustinos (2017, pp. 155-157) on the potential problem of finding relevant talkback calls for qualitative analysis. In their research, they paid to search a media monitoring database by keywords related to the topic of the calls. However, if there is no media monitoring database available or if fees are prohibitive or if the research is not focused on a topic but specific features of language, this might prevent this kind of research occurring unless the phenomena being studied (i.e. a topic or lexical feature) is very common. This chapter indicates a novel way for researchers interested in using talkback, or indeed any other publicly-available audio data, as a data source and describes a way to get at the content of this data, with the potential to ask and answer new kinds of questions.

To interact with the content of the corpus I applied software-based search procedures to find specific keywords. I transcribed the immediate co-text to allow text-based analysis using the basic analytical tool of corpus linguistics, concordances in the Key Word In Context (KWIC) format, but the kind of context accessible was both this transcribed co-text and the full audio record itself. I also evaluated the limitations and potential of quantitative analysis, specifically by using a reference corpus of around 80,000 words of transcribed talkback calls recorded from New Zealand talkback radio, which was contained in the Wellington Corpus of Spoken New Zealand English, as well as other relevant comparison data.

In this section I first discuss how I developed and validated the method for extracting the keywords from digital audio data. I then discuss how I built the corpus of talk radio broadcasts and

process for extracting the keyword *economy* and how I conducted analysis. As a significant contribution of research reported in this chapter and the wider thesis, I evaluate this approach in the next chapter (see Section 7.3.2).

6.3.1 Developing and validating a method for extracting keywords from audio data

In developing my approach for this chapter, I began with the idea of using radio broadcasts and was interested in the possibilities of speech-to-text for semi-automated transcription. The original hope was that it might be possible to use software transcription and improve this manually if it was accurate enough to begin with. I researched and trialled available software and the results of this were typically inaccurate and the process very slow. The poor quality of the transcripts could be attributed to multiple issues, including the kinds of accents the software had been trained on, but the key problem I identified was that the language model was derived from training data and so automatic transcripts were a reflection of the probabilistic language structures derived from the process of training the language model. While it was possible to train a new language model there was a problematic circularity of compiling a training corpus to use to train a model in order to transcribe text, knowing that the transcripts would be a function of the training corpus.

After further reflection and research on the possibilities of the software I decided that an approach that only detected a keyword or keywords could avoid problematic assumptions about the structure of the language involved with full transcription. The promise of detecting a keyword or phrase is that it did not require a language model based on a training corpus and instead found sections of audio that were estimated to sound-like the phonetic representation of the keyword or keywords. The PocketSphinx software (Carnegie Mellon University, 2016), part of the Carnegie Mellon University CMUSphinx toolkit (*CMUSphinx Documentation*, 2016), supported keyword detection, but utilised an acoustic model trained on speakers from the United States and not New Zealanders. However, the model trained on US speakers did perform well in initial tests with a small set of audio recordings of radio broadcasts featuring speakers with a range of New Zealand accents. Although it would be possible to train an acoustic model using New Zealand speakers, this was very

involved and beyond the scope of this project. I attempted to validate the accuracy of detection using multiple speakers with a range of New Zealand accents in a more rigorous way, as will be described next.

To validate the accuracy of the detection method with New Zealand speakers I compiled a data-set of audio files from parliamentary debates extracted from the public video records. Given that I had the transcripts from the official parliamentary proceedings I could identify specific instances featuring *economy* that could be tested against the detection method. This also allowed me to test the software's detection threshold parameter by repeating the detection process after adjusting the parameter. The test data-set contained over 6.5 hours of audio and the parliamentary record indicated that during this time period there were 108 mentions of *economy* by 29 different speakers of various ages, genders, and socio-economic backgrounds.¹³⁸ As the adapted confusion matrices for different parameter settings shows in Figure 6.1, the results of running the tests revealed that accuracy rates (i.e. true positives) above 85% were possible. What the results also revealed was a trade-off between accuracy and false-positives. For example, increasing the detection threshold resulted in only four more successful detections but 62 more false positives. The balance between true and false positives would need to be balanced when hundreds of hours of audio data was used. This also indicated that the process for extracting keywords for the study (discussed in Section 6.3.2.2) would need to provide a way to identify, code and exclude the false positives.

¹³⁸ The distribution was not even. There were 17 examples by John Key (National; Prime Minister), Kennedy Graham (Green), 11 by David Parker (Labour), 17 speakers with between 2 and 10 examples, and 9 speakers with only one example.

At 1e-20 threshold (85% accuracy)				
		PREDICTED		Total
		YES	NO	
ACTUAL	YES	92	16	
	NO	71		108
Total		163		

At 1e-25 threshold (89% accuracy)				
		PREDICTED		Total
		YES	NO	
ACTUAL	YES	96	12	
	NO	133		108
Total		229		

Figure 6.1 Confusion matrices for validation testing of keyword detection with New Zealand speakers

This validation process also allowed me to examine whether the official transcripts accurately reflected spoken instances of *economy* accurately and the findings indicated that the transcriptions practices of the New Zealand parliament did not appear to veer markedly from the features observed in research on the UK parliament with regard to the substantive content of debates (see Section 5.2.2). In addition, what was interesting was that the software detected an additional instance of *economy* not included in the official transcript.¹³⁹ The extra instance of *economy* was the result of an MP speaking past the time allocated for the session and the portion of audio after the end of the session was not included in the official transcript. However, the speaker continued their speech in the next session after a break with the same words and so the words were transcribed in the following session.

This testing process confirmed the potential of this method for automatically detecting New Zealand speakers using a specific keyword, even using an acoustic model trained on US speakers.¹⁴⁰ However, there were still limitations that I expected in applying this to recordings of radio broadcasts. The audio quality of parliamentary recordings was good and there was typically only one speaker speaking at a time in the parliamentary session chosen. With radio data there was the possibility of multiple speakers interacting and overlapping, sections of music (predominantly these are advertisements in the talk radio stations chosen) and also varying audio quality between the host, in a

¹³⁹ This instance is not included in the confusion matrices.

¹⁴⁰ For readers interested in applying this approach, it should be noted that the rate of true positives (and false positives) would be improved by training a model on New Zealand speakers. It should also be noted that, while I did anecdotally test a range of words in initial tests, the validation against the parliamentary recordings only featured the word *economy* and results could vary for other words. Finally, this method, although promising, will not detect instances where the word is not fully realised, for example econ((May-esque-cough))omy.

studio designed to record their voice at a high quality for broadcast, and talkback callers, using different handsets. Therefore, although the 85%+ accuracy rate was promising, this rate could not be expected when applied to talk radio data. When tested on recordings of talk radio broadcasts the software successfully picked up instances of use of *economy* from both hosts in-studio and talkback callers but with a much higher rate of false positives. To reduce the number of false positives to deal with to an acceptable level I tuned the detection threshold appropriately.¹⁴¹ As will be observed in the next section, even with this adjustment, there was still a very large number of false positives to manually deal with.

6.3.2 The process for building the audio corpus of talk radio broadcasts and for extracting and analysing mentions of *economy*

Figure 6.2 depicts the process for building the audio corpus of talk radio broadcasts and the process applied to extract valid instances of the keyword *economy* from the digital audio files and to derive a concordance. As the figure indicates, this can be conceptualised as a two-stage process, first to build the audio corpus and then to derive a concordance. As I am trying to represent this process in the form of a generic model that could be reproduced, I have not depicted the database tables in this diagram but will discuss this where relevant below. I will leave further discussion of the effectiveness of this method until after the analysis.

¹⁴¹ I applied the threshold “1e-15” for the talk radio data in all instances reported in the remainder of this study. For reference, the syntax I used to execute PocketSphinx from the command line was:
`pocketsphinx_continuous -infile "source-audio-file.wav" -hmm ../../model/en-us/en-us -dict ../../model/en-us/cmudict-en-us.dict -keyphrase "economy" -kws_threshold 1e-15 -time yes > "timing-output-file.txt"`

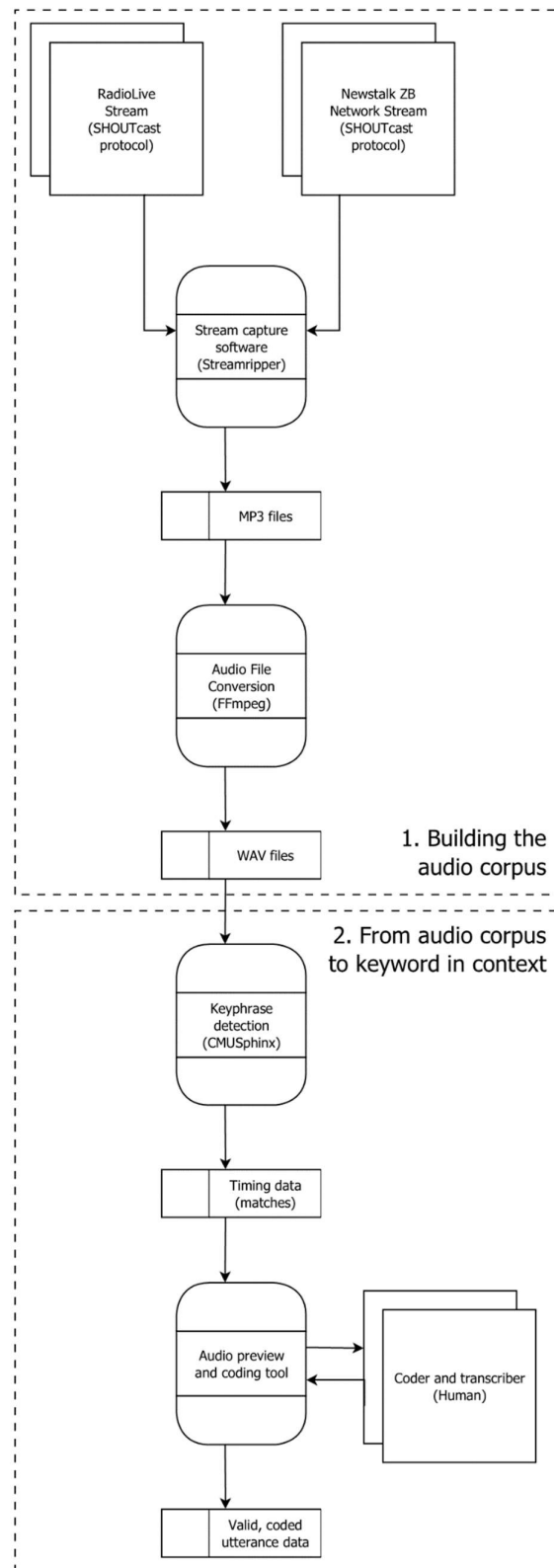


Figure 6.2 Data flow diagram showing the process to capture audio for the corpus of talk radio broadcasts and detect instances of the keyword *economy* using speech recognition software.

6.3.2.1 Building the audio corpus

The files in the audio corpus span a time period from 1pm on February 14 to midnight on March 31, 2016. In total the corpus is 1788 hours of audio and is approximately 59.9GB in the original MP3 format in 1992 separate files. This choice of time period was opportunistic and the goal was to gather a large amount of data in a relative short, but continuous, period of time. Remembering that the end date for the audio corpus was aligned with the end date of the parliamentary data, the point of this alignment was to be able to relate the language use of speakers on talk radio to the context of parliamentary party politics for analysis where relevant. Attempts to collect a random sample of days or hours over a longer period would have made comparisons difficult and would constitute the same kind of decontextualising move that I have been critical of in previous research on lay theories.

The process for building the audio corpus (see Figure 6.2) involved capturing digital audio streams from two radio stations and converted the audio files to a format that was compatible with the keyword extraction process. Both talk radio stations had a SHOUTcast streaming feed¹⁴² available and I used an open source command line utility (2016) to capture the streams as MP3 files. I wrote a batch process that ran every hour to begin capturing a new one-hour long audio file. The file names were timestamped with the start time so the date and time of each audio file was clear. Audio files were converted to the appropriate formats for PocketSphinx using FFmpeg (2016), which allowed me to automate batch conversions via a command line interface.¹⁴³ In total there were approximately 894 hours out of the 954 possible hours that could be recorded for each radio station.¹⁴⁴ The process to build the audio corpus could be duplicated by other researchers using streams of other radio stations (perhaps to target a recurring show with the same host). Alternatively, there are publicly accessible

¹⁴² SHOUTcast is a very common streaming technology for internet radio.

¹⁴³ For the sake of thoroughness, the command line syntax for the file conversion was:
`ffmpeg.exe -i "sourcefile.mp3" -ac 1 -ar 16000 -acodec pcm_s16le "outputfile.wav"`

¹⁴⁴ Occasionally through computer restarts or connection failure (due to outages of the Shoutcast servers or my internet connection) there were periods of time that were not recorded. When a connection failed the stream capturing software would attempt to create a new file with a new connection. To indicate how often this restart occurred there are 1992 separate files (*Newstalk ZB* 1006 files; *RadioLive* 986 files) totalling 1788 hours. I did not record the period 6pm to 9pm each day when the computer was recording and processing television news for another project and so the recordings were running a maximum of 21 hours a day. Although only anecdotal, when I listened to the 6pm-9pm over a few days, I observed longer news and sports segments that were not the intended target data for analysis.

archives of radio shows or other audio featuring speech that could be crawled and downloaded as the starting point for an audio corpus of this kind.

6.3.2.2 From audio corpus to a concordance of *economy*

An audio corpus, in the way I have set out here, is opaque to textual readings and the prototypical text analytic tools of corpus linguists. Frequency lists, concordancing, keyness analysis, collocation analysis and so on are not straightforwardly accessible, the individual examples of language use can only be listened to and not read. Deriving an ordered list of the most frequent words in the audio corpus or deriving a specific measure, for example collocation measures that require the quantities of occurrence of words outside the collocation span, are not practically calculable. Any analysis of the contents of the audio corpus that is analogous to those applied to text corpora will require a software-based process to be applied to the audio files that emulates the methods of interrogation and calculation of standard corpus methods. What is possible, and this is in keeping with the research questions for this chapter, is to utilise the ability to index a keyword using the method described in the **previous section** to build a concordance of the word *economy* and to leverage this for both quantitative and qualitative analysis.

A reminder of the definition of a concordance is useful at this point. According to the classic definition of Sinclair (1991) :

A concordance is a collection of the occurrences of a word-form, each in its own textual environment. In its simplest form, it is an index. Each word-form is indexed, and a reference is given to the place of occurrence in a text.

(Sinclair, 1991, p. 32)

This translates powerfully to manipulation by computers because a software-based process can rapidly scan a collection of texts and perform exact matches based on a word-form. In contrast, the process I am outlining to create the concordance does involve creating an index of valid instances of *economy*, however this index is probabilistic because the detection process has an error rate. This is also much more involved than the standard kind of textual indexing of a corpus that uses exact matching because the process requires excluding the false positives and transcribing the immediate

co-text. However, these instances are still contextualised in their “textual environment” or, in other words, for each indexed instance, both the surrounding audio recording and the manual textual transcription, is accessible.

I now describe the process, depicted in Figure 6.2, of compiling the index of keywords in the audio corpus and to produce a KWIC-type concordance view. To capture many instances of the mention of *economy* from audio data I applied the keyword spotting process tested in Section 6.3.1. The PocketSphinx software, with the appropriate parameters, outputs timing data for each instance of the keyword it detects in an audio file. Again, I automated this by writing a script that processed the audio files in batches. The audio files and the timing information of detected instances (which includes true and false positives) were the inputs to an audio preview and coding software tool that I wrote for coding and manually transcribing the context of the utterances. Although, in the data flow diagram this is represented as one process, I used two separate software tools to fulfil different functions (and it is recommended that these be combined if this process were repeated).

The first software tool (see the very basic interface developed for this in Figure 6.3) took a text file with timing data produced by the detection process for a specific file and allowed me to playback the corresponding audio and to transcribe the true positive matches with the immediate text content with the fields for each instance akin to a concordance view. The system allowed audio of various intervals around the detected instance to be played back (e.g. the “economy” link triggered playback at the time detected, while the “10 sec” link triggered playback 5 seconds before detected keyword). As the figure shows, only the instances with valid *economy* matches were transcribed for immediate context and, except in the case of word-forms related to *economy*, false positives were left blank. When the “save” button was clicked this created a record of true positives and false positives¹⁴⁵ in a database table with timing information, the source file and transcribed text. On each “save” the

¹⁴⁵ The words repeatedly coming up to match *economy* were words or phrases that could be interpreted as sounding like *economy*, e.g. *accompany* and *a kind of* and *colin meads*. In addition, there were different word forms related to *economy* (e.g. *economists*, *economies*, and *economics*). Sometimes the matches sounded nothing like *economy* (e.g. music for adverts or noises or sections of speaking that did not align to word boundaries).

tool retrieved another file with timing data and the process was repeated until all detected instances were coded.

Audio Corpus Transcriber

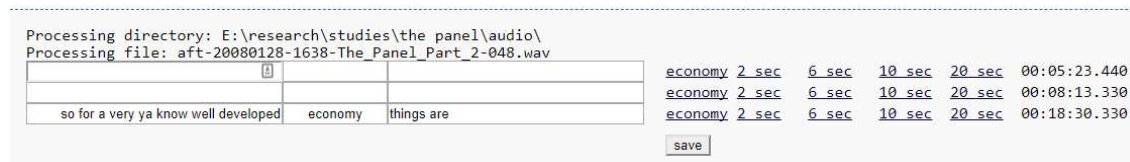


Figure 6.3 Screenshot of interface for true/false positive initial transcription¹⁴⁶

In contrast to validation testing with parliamentary data there was a much higher proportion of false positives with the radio data (see Figure 6.4). This did, however, match my initial expectations after testing with radio audio files. Of the 7005 predicted matches, 12.2% were valid matches (true positives) and 87.8% were invalid (false positives).¹⁴⁷ 198 (3.2%) of the false positives were close matches to word-form variants of *economy* (i.e. *economics*, *economic*, *economists*, *economies*). As these numbers indicate, while identifying false positives was straightforward there were many audio samples to listen to and this coding process was a significant undertaking and was conducted over a week. In contrast to the parliamentary validation testing, the number of false negatives was unknown and it should be noted that I did hear instances of *economy* in the immediate context of instances detected that the software had not detected. Only the valid matches detected by the software process were included in analysis. Something I realised during this stage was that it could have been productive to configure the process to search for *economies* (and potentially other word-forms of *economy*) as well. The word *economies* is a sound-alike for *economy's* (i.e. the contraction of *economy is* or the possessive form). While the detection process detected instances of *economies* and *economy's*, including alternatives explicitly may have yielded more instances to analyse. This was not further investigated and this is something I will investigate when I conduct future research on the keyword spotting approach.

¹⁴⁶ The filename in this example is for another project.

¹⁴⁷ With my subsequent testing using radio audio of a more consistent quality (a show with in studio conversations) for another project the ratio of true to false positives was better and true positives were closer to 20% of predicted matches.

At 1e-15 threshold (unknown accuracy)

		PREDICTED		Total
		YES	NO	
ACTUAL	YES	856	unknown	unknown
	NO	6149		
Total		7005		

Figure 6.4 Adapted confusion matrix for true and false positive coding of *economy* using the talk radio corpus

After further interaction with the data I realised that many of the matches were not in the context of talkback calls. I decided to undertake a second stage of transcription and coding (see very basic interface developed for this in Figure 6.5). This process took all true positives within an audio file derived from the initial coding and allowed me to perform a second round of coding to identify who specifically was talking (host/talkradio, talkback caller, newsreader, expert, politicians, media representative and other), to name them (except in the case of newsreaders) and to tag whether the speech involved a caller (i.e. tagged “Call”) or other kind of speech (e.g. “Commentary” or “Interview”). To do this coding I listened to the audio examples and sometimes extended portions of audio context. The interface, like the interface for initial coding, allowed playback of different length sections of audio for context. The data for this step was stored in a new database table that featured the timing data from the first coding process along with additional annotations (speaker, speaker name, tags, a unique identifier for each separate call, utterance text and notes).

In addition, the transcripts, which at that point were only 3-5 words either side of *economy*, were extended to capture more meaningful utterances. Part of the aim of this was to capture units of meaning that related to sentences in parliament, as this would be one of the comparisons to be made, but also to provide additional context for qualitative engagement with the concordance lines. Sentences are an obvious feature of written discourse, but the sentence is not meaningful in spoken discourse (Stenström, 1994, p. 7). A change of turn provided an obvious marker denoting the end point on an utterance, but in deciding exactly what to transcribe for an utterance I took notice of pauses and changes in intonation (p. 7) as well as the requirement to transcribe enough context to make

sense of the use of *economy*. I only transcribed words (or sounds in the case of disfluency or filled pauses) without punctuation.

00:46:02.250 economy 2 6 10 20 60 120 sec

primary caller john tags

money gets added to the economy when ah a person gets born

yeah cause money gets added to the economy when ah when a person's born you have to add money to the economy to make the system work otherwise there'll be a dwindling supply

begins 45:13,UBI

00:46:05.460 economy 2 6 10 20 60 120 sec

secondary caller speaker name tags

you have to add money to the economy to make the system work

you have to add money to the economy to make the system work

notes

00:46:28.790 economy 2 6 10 20 60 120 sec

primary host/talkradio leighton smith call.john

stick another twenty thousand dollars in the economy doesn't work that way

there's not a counter sitting there saying oh there's another birth down at um middlemore hospital ah stick another twenty thousand dollars in the economy doesn't work that way

notes

Figure 6.5 Screenshot of interface for utterance transcription and coding of speakers

The speaker types were derived from initial inspection of the data and most are easily interpretable from their labels. However, I will describe three of these. Firstly, the “Expert” speaker type was used for people who were consulted for business and economic expertise and this type includes some speakers identified as economists, as well as people promoted for their expertise in business or “the markets”, the latter of which often worked for investment firms. Secondly, the “Media Representative” type was used for speakers who worked for a news organisation as a

journalist or referred to as a correspondent, typically focused on news and events outside New Zealand. Thirdly, “Other” type includes a variety of speakers, including representatives of specific businesses (e.g. Chairman of Silver Fern Farms) or interest groups (e.g. CEO of the Canterbury Chamber of Commerce), politicians from other countries (e.g. UK Prime Minister David Cameron), and people consulted for their expertise in non-economic domains (e.g. an ecologist).¹⁴⁸

As also indicated in Figure 6.5, the second coding process also included the ability to code specific matches to one of three match types. The default type was “primary” and this transcribed utterances with at least one instance of *economy* being mentioned. If two or more instances of *economy* were related to the same utterance the subsequent matches were coded to a “secondary” type. There was no data loss from this process as the “secondary” coded instances were included within the transcribed text for a “primary” type and the timing information retained. This “secondary” type accounted for 3.4% of the total valid matches from the first phase of coding (i.e. 29 out of 856). Some valid *economy* matches were also coded using an “ignore” type. These *economy* matches were typically expressing value for money in the context of advertising claims. Surprisingly, 14.6% of matches were set to “ignore” (i.e. 125 out of 856).¹⁴⁹

6.3.2.3 Describing the coded data

In total there were 702 “primary” utterances containing *economy* that were used for analysis. Table 6.1 and Table 6.2 shows summaries of this data after this coding process. Table 6.1 displays a frequency summary based on speaker types. Table 6.2 displays a frequency summary for different tags for the hosts. Table 6.1 displays frequency information for the number of utterances featuring *economy* that are related to talkback calls (16% of all captured utterances, or 112 out of 702)¹⁵⁰, which

¹⁴⁸ The distinction between economic and non-economic experts may be problematic, especially in a thesis contesting this distinction. However, from listening to the context the “Experts” were more likely to be asked about the economy directly or would talk about it from the authority of their position as experts in the economic domain.

¹⁴⁹ 45% of ignored instances related to one advertisement that mentioned the *economy rate of paint*, other advertisements and discussion mentioned *economy* in the context of travel (e.g. *economy class flights*). This also included rare usages, like the *economy rate* of a bowler in a Cricket match. It should be noted that these usages of *economy* were primarily in the contexts of advertisements and the segment of news related to sports.

¹⁵⁰ The number of utterances on calls was less than hoped, but still provided many utterances for analysis. The 112 utterances containing *economy* was still many more than was available in existing corpora (e.g. the WSC or Canterbury Corpus, see: Maclagan & Gordon, 1999; Gordon, Maclagan, & Hay, 2007).

is based on the number of utterances for “Callers” in Table 6.1 and the number of utterances for talkback hosts on calls (see “Call” frequency from Table 6.2). The talkback data reflected 85 separate calls.¹⁵¹

The subset of utterances related to talkback calls by callers and hosts was small relative to the other utterances captured (i.e. 84% of captured utterances containing *economy* were not in the context of talkback calls). Most of these non-call talk radio utterances, relate to the reading of the news, interviews between hosts and experts, politicians, media representatives and others, and commentary and other kinds of monologues by hosts. While it would be tempting to generalise or draw conclusions from the small number of callers indexed saying *economy* in the corpus relative to the hosts (and other speakers), this can only be considered as indicative, especially given that the quality of audio varied between callers (using a variety of handsets) and hosts (and other well-recorded speakers like newsreaders).

Table 6.1 Utterances containing *economy* by speaker type

Speaker Type	Newstalk ZB		RadioLive		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Host	201	53.3%	110	33.8%	311	44.3%
Newsreader	74	19.6%	62	19.1%	136	19.4%
Expert	29	7.7%	64	19.7%	93	13.2%
Media Representative	22	5.8%	28	8.6%	50	7.1%
Caller	21	5.6%	22	6.8%	43	6.1%
Current NZ MP	16	4.2%	9	2.8%	25	3.6%
Other	14	3.7%	30	9.2%	44	6.3%
Total	377	100%	325	100%	702	100%
Caller AND Host on Call	68	18.0%	44	13.5%	112	16.0%

Although we cannot draw conclusions from the number of host utterances, the analysis indicated that *economy* was a significant feature of hosts’ talk in general, something hosts raised as a prompt for people to phone in to discuss, and one radio station was using statements by hosts that included *economy* in repeated promotional segments. Table 6.2 is a summary of the tagging of utterances for hosts and is clear that most instances of hosts talking are not on calls. The most frequent “Commentary” tag (110 instances, 35.4% of host utterances) included various kinds of editorialising,

¹⁵¹ Callers said *economy* in 35 calls and hosts said *economy* in 55 calls. There were 5 calls where hosts and callers both said *economy*.

opinion-giving, and prompting (in the case of talkback hosts encouraging people to call in to discuss topics). There were also two types of speech identified that featured hosts reading material from other parties. The “Feedback” tag (6.8%) was used when speakers were reading correspondence (email or text messages) from listeners and was, in addition to “Calls”, a way that listeners could participate in the broadcast. The “Quoting” tag (7.4%) was used when hosts read an article, editorial or some other kind of published document (e.g. academic research, report by an interest group), typically as something to comment on or as a prompt for callers to discuss. The other utterances were either dialogues, in the form of interviews or studio discussions, or monologues, including introductions (i.e. introducing what a show would discuss or introducing an interview) or, on *Newstalk ZB*, pre-recorded promotional slots repeating a significant utterance by a host.

Table 6.2 Summary of Host Utterances by Type

Host Utterance Tag	Newstalk ZB		RadioLive		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Commentary	77	38.3%	33	30.0%	110	35.4%
Call	47	23.4%	22	20.0%	69	22.2%
Interview	11	5.5%	21	19.1%	32	10.3%
Introduction	10	5.0%	15	13.6%	25	8.0%
Quoting	20	10.0%	3	2.7%	23	7.4%
Feedback	17	8.5%	4	3.6%	21	6.8%
Studio	6	3.0%	12	10.9%	18	5.8%
Promotion	13	6.5%	0	0.0%	13	4.2%
Total	201	100%	110	100%	311	100%

Names for speakers were assigned to all speakers (except newsreaders) by listening for their names when they were introduced. In total across these 566 utterances there were 146 different speakers. Table 6.3 displays a summary of speakers by speaker type. Based on listening for names and characteristics of people’s voices, there were 32 different callers. As already stated, these reflect 35 separate calls, with one caller calling three times and another twice. Most speakers were only detected to have mentioned *economy* once, but 7 speakers were detected saying it more than once. Of the 32 callers, based on assuming their gender identification from their name and voice, 7 (22%) were classified as female and 25 (78%) male. There was considerable variation in how many times a speaker mentioned *economy* for specific speaker types. In the case of “Media Representatives”, 14 out

of 50 utterances were by Tony Field, a business journalist. Of the 25 utterances by current MPs, 8 were by Grant Robertson (Labour), 4 by Andrew Little (Labour) and 4 by Bill English (National).

Regarding the “Experts” in the data-set, it is worth making two points. Firstly, there was also considerable variation in the “Experts” category with over half of the 93 utterances by the 19 experts were by two speakers (Bernard Hickey, introduced as an “economic commentator”, was responsible for 41 utterances; Shamubeel Eaqub, introduced as an “independent economist”, was responsible for 13 utterances). Secondly, and following from this, most of the *economy* utterances belonged to two people, and there appeared to be only a very limited set of voices being consulted for their economic wisdom. Half of the speakers worked for banks, investment firms or other financial institutions. There were very few economists on air, and of the seven economists identified (including Eaqub), only one of these was an academic economist (working at the University of London). That there was such a narrow group of expert speakers was striking, but even more striking was the lack of New Zealand academic economists represented. The only New Zealand academics identified were from business or finance departments.

Table 6.3 Number of speakers by speaker type

Speaker Type	Speakers		Utterances	
	Frequency	Percentage	Frequency	Percentage
Host	28	19.2%	311	44.3%
Newsreader	Not coded		136	19.4%
Expert	19	13.0%	93	13.2%
Media Representative	21	14.4%	50	7.1%
Caller	32	21.9%	43	6.1%
Current NZ MP	11	7.5%	25	3.6%
Other	35	24.0%	44	6.3%
Total	146	100%	702	100%
Caller AND Host on Call	46	31.5%	43	6.1%

The distribution of utterances by hosts also varies greatly, as do the number of hosts utterances in the context of calls (see Table 6.4). In total there were 28 hosts, split evenly between the two radio stations. Of the hosts, 14 of these hosts had no utterances on calls and the other 14 were

responsible for the 69 host utterances spread over 55 calls.¹⁵² The host with the most utterances, Bruce Russell, was also the host featured on the most talkback calls, however there was considerable variation between hosts both in total utterances and utterances on calls. It should also be noted that only 5 of the 28 hosts were females (18%), and there were only 2 female hosts with utterances in the context of calls. This imbalance reflects the gender imbalance in talkback hosts observed by McMillan (2016, p. 269).

Table 6.4 Summary of hosts total utterances and utterances on calls

Speaker Name	Station	Utterances		Utterances on Calls	
		Frequency	Percentage	Frequency	Percentage
Bruce Russell	Newstalk ZB	43	13.8%	19	27.5%
Mike Hosking	Newstalk ZB	39	12.5%		
Leighton Smith	Newstalk ZB	31	10.0%	3	4.3%
Duncan Garner	RadioLive	28	9.0%	3	4.3%
Paul Henry	RadioLive	23	7.4%		
Rachel Smalley	Newstalk ZB	18	5.8%		
Gary Denvir	Newstalk ZB	17	5.5%	15	21.7%
Tim Beveridge	Newstalk ZB	13	4.2%	7	10.1%
Tony Amos	RadioLive	13	4.2%	5	7.2%
Mark Sainsbury	RadioLive	9	2.9%	3	4.3%
Alison Mau	RadioLive	8	2.6%	1	1.4%
Kerre Mcivor	Newstalk ZB	8	2.6%		
Andrew Dickens	Newstalk ZB	8	2.6%		
Larry Williams	Newstalk ZB	7	2.3%		
Karen Hay	RadioLive	7	2.3%	3	4.3%
Mark Dye	Newstalk ZB	6	1.9%	1	1.4%
Hayden Rickard	RadioLive	5	1.6%	5	7.2%
Marcus Lush	Newstalk ZB	5	1.6%	1	1.4%
James Coleman	RadioLive	5	1.6%		
Tim Sisarich	RadioLive	4	1.3%		
Jack Tame	Newstalk ZB	4	1.3%		
Joe Reid	RadioLive	3	1.0%	2	2.9%
Heather Du Plessis-Allan	RadioLive	2	0.6%		
Tim Roxborough	Newstalk ZB	1	0.3%	1	1.4%
Brendan Telfer	RadioLive	1	0.3%		
Jamie Mackay	Newstalk ZB	1	0.3%		
Mitch Harris	RadioLive	1	0.3%		
Jeff Mctainsh	RadioLive	1	0.3%		
Total		311	100%	69	100%

As indicated by Table 6.1 and Table 6.2, there were differences in the proportions of speaker types and tags between the radio stations. There were two key reasons observed for these differences. Firstly, the most represented speaker type on both *Newstalk ZB* and *RadioLive* were talk radio hosts

¹⁵² Out of the 55 calls where hosts said *economy*, there were 45 separate callers, with one caller represented on six separate calls. Again, using their names and characteristics of the speakers' voices I was able to match speakers. The gender balance of these callers also closely matched that of the callers saying *economy* (20% female, 80% male). In total across the 85 calls there were 69 separate callers represented.

and it should be noted that the host's role in a show, and consequently the role of other speakers, varied greatly. For example, the breakfast programmes on both stations were predominantly commentary and interviews related to current affairs. The evening programming on both stations was predominantly talkback. However, there were differences between the daytime programmes in terms of the amount of time allowed for talkback calls and other kinds of speech. These differences can be seen in Table 6.4, where the two most frequent speakers vary markedly on the number of mentions within calls, with Bruce Russell an evening talkback host with many utterances in the context of talkback calls and Mike Hosking a breakfast host with none. Secondly, specific hosts appear to have specific preferences. For example, one host on Newstalk ZB, Leighton Smith, frequently quoted articles, editorials and other published material that mentioned *economy* and then commented on this, using these as prompts to flag the topics he indicated were relevant and to encourage listeners to call to discuss them.

6.3.3 Analytic procedure: using comparisons to analyse features of the use of *economy* on talkback radio

The procedure I have described in the previous sections identified many instances of speakers using *economy* in the context of different kinds of monologues and dialogues about the news and topical issues. My analysis concentrated on the 112 utterances from talkback calls and includes both callers and hosts. These utterances were essentially a concordance of *economy*. To analyse use of *economy*, I utilised the concordance of *economy* and also compared the talkback call utterances with other relevant data-sets as a way to understand patterns of use. The keywords that emerged from these comparisons were analysed using concordance analysis and close qualitative readings (and listenings) in the context of the call.

To study the content of utterances on talkback call it was useful to compare those utterances with other texts from other corpora to detect what was distinctive about the use of *economy* on calls. The *economy*-utterances from talkback were compared with the talkback radio section of the Wellington Corpus of Spoken New Zealand English, the set of utterances containing *economy* from

the wider context of talk radio (i.e. excluding calls), and all sentences containing *economy* from the parliamentary corpus.¹⁵³ I will now discuss the purpose of each of these comparisons.

The Wellington Corpus of Spoken New Zealand English (WSC) includes over 80,000 words of talkback radio recorded in 37 samples of audio between 1990 and 1994.¹⁵⁴ This primarily included dialogues involving hosts and callers. The usefulness of the subcorpus of talkback radio, as opposed to using a general reference corpus like the WSC itself, was that it allowed the opportunity to control for specific features of talkback discourse. These comparisons allowed me a rationale to exclude frequent and primarily grammatical words and a way to identify distinct features of *economy* utterances rather than features characteristic of talkback itself.¹⁵⁵ Another way of conceptualising this comparison is that it was detecting words that were over-represented in the collocation span of transcribed text against a large sample of talkback transcripts.¹⁵⁶ It should be noted that the talkback subcorpus did contain 23 instances of *economy* in seven separate files, but almost half of these (11 out of 23 instances) related to one specific file and the majority of these (9 out of 11 instance) related to one interaction between a host and a caller within that file.

Whereas the comparison against the WSC Talkback subcorpus was aiming to identify distinctive patterns of collocation between *economy* and other words on talkback calls, the purpose of comparing the use of *economy* on talkback calls with the use of *economy* in utterances from talk radio and parliament was to understand differences. These comparisons were intended to identify what was characteristic about the use of *economy* on talkback calls in contrast to the use of *economy* in media discourse and in political debate. Here, I was interested in both what was over-represented on talkback

¹⁵³ Prior to these comparisons, all texts were tokenised using the Stanford parser, including the talkback calls. In the case of the WSC this required removing the non-lexical annotations (e.g. pauses) programmatically.

¹⁵⁴ The talkback subcorpus of the WSC contained 37 separate files containing transcribed utterances, with each file representing a specific continuous time period. Please note that the word count quoted in the WSC documentation for the talkback subcorpus (84,321) differs from the token count after the subcorpus was tokenised using the Stanford parser (87,693).

¹⁵⁵ I also compared the WSC Talkback with the rest of the spoken WSC to understand lexical features characteristic of talkback radio.

¹⁵⁶ It should be noted that the use of an effect size measure of keyness (Log Ratio) to detect over-representation within a specific span of text related to a keyword is doing a similar kind of statistical operation to measures of collocation.

calls, to enrich the comparisons with the reference corpus, but also what was under-represented, to understand what was different or absent.

Although my focus was the talkback call data, the additional data from parliament and talk radio (e.g. for newsreaders, hosts when not on calls, experts and politicians) was relevant and is discussed where it is relevant. The concordance of non-call talk radio utterances was not originally intended for analysis, but this did contribute to the findings of this chapter, providing additional context for the calls in relation to prominent news stories being discussed as well as an additional data source for comparison. Viewing talkback calls in relation to both talk radio and parliamentary discourse enriched analysis and allowed me demonstrate connections between talkback and these other contexts.

6.4 Results and Discussion

The results of the keyness comparison with the WSC Talkback subcorpus are shown in Table 6.5. The table only shows keywords with a Log-likelihood of 10.83 ($p < 0.001$) or higher. Included in the table are also Log Ratio scores for comparisons with the non-call talk radio *economy* utterances and sentences featuring *economy* from the parliamentary corpus. There are several words that reflect findings from the study of parliament (e.g. *government*, *our*, *zealand*), but other words that indicate some compelling differences (e.g. *people*, *money*). It should be noted that these quantitative findings were only a first step and because there is only limited data it was important to consider the number of speakers and utterances featuring each keyword. For example, a host's use of *sick*, although perhaps indicating use of a body or health metaphor that has been mentioned in the literature (Furnham, 1988, p. 126; Leiser & Kril, 2017, p. 148), represented only one utterance by one speaker on talkback calls:

no it's sick (.) it is sick (.) it is sick it is sick and it's a catastrophe a catastrophe for the new zealand economy we have to sit up and listen and we have to take notice (.) this is sick and it's serious

Table 6.5, therefore, also shows the number of speakers who said the keyword and the number of utterances featuring the keyword.

Table 6.5 Keywords based on comparisons between talkback call utterances and WSC Talkback subcorpus¹⁵⁷

	Log Ratio (vs WSC Talkback)	Log Ratio (vs Non-Calls)	Log Ratio (vs Parliament)	Frequency	Distinct Speakers	Distinct Utterances
economies	8.043	4.505	2.869	5	4	4
low-wage	8.043		3.54	5	5	5
immigration	7.306		4.536	6	4	6
sick	7.043		6.125	5	1	1
etcetera	4.943	5.991	11.78	7	3	4
thinking	3.873		4.066	5	1	2
everybody	3.235	5.505	3.803	5	2	4
goes	3.136	3.991	3.672	7	4	4
pay	2.863	2.862	2.706	8	4	5
money	2.833	1.598	2.837	20	12	16
world	2.814			8	6	7
zealand	2.239		-1.263	12	9	11
government	2.229		-1.528	8	7	8
by	2.069	1.446		21	8	10
more	2.014			19	11	12
our	1.742			17	10	13
because	1.494	1.598	1.407	22	11	19
people	1.155	1.161	1.776	32	17	24
the	0.916			227	41	95
we	0.793			50	13	20

Analysis of the keywords in Table 6.5 relied on both concordances and listening to the context of the call audio. I have structured discussion of the results of this analysis in relation to four key findings.

6.4.1 Nation-Economy-Government

As I suggested in the last chapter, ideas about nation, government and economy appear closely related and there was also evidence for this when analysing talkback calls. The prominent use of *our*, *Zealand*, and *government* when compared with the reference corpus indicated the relevance of the kinds of patterns of collocation found in parliamentary rhetoric. What was surprising was that closer analysis revealed instances where citizens were implicating themselves and the collective in the actions of government in relation to the economy.

Concordance analysis and closer readings supported the nation-centric quality of *economy*-talk. Speakers when they used *economy* were predominantly referring to the national economy. The most common ways of doing so were the use of *New Zealand economy* (in 4.8% of the occurrences of

¹⁵⁷ Note, this excludes *economy*.

economy), *our economy* (5.6%), and *the economy* (accounting for half the occurrences of *economy*).¹⁵⁸

As was found in the study of parliamentary rhetoric, *the economy* was the most common way of referring to the nation's economy. The use of *our* or *we* in the context of *economy* could be to represent some other collective. But, as can be seen from the concordances of the pronouns *our* (see Table 6.6) and *we* (see Table 6.7) the primary use of these pronouns are to reference the nation, which includes the speaker as a citizen, and to indicate the argumentative appeal is directed to an audience of fellow citizens. As in the previous study, there were other markers and examples where speakers were making the link between *economy* and nation explicit (e.g. “state of the nation state of the economy” or “the economy around our country” or “this country's the economy would crash”).

Table 6.6 Concordance of talkback call speakers mentioning *our* in context of *economy* (all rows)

01/03/16	Caller	Sarah	ow they 're they 're they 're the economy around our country is is lowering
27/02/16	Host/Tall	Tim Beveridge	ow we 've been we 've been praised for the way our economy 's been managed ah you know
26/02/16	Caller	Mark	hey um i think our economy 's in a in a bit of a downward spiral as
20/03/16	Host/Tall	Gary Denvir	le shape um in terms our of of the way the way our economy 's run however we rely heavily on our
14/03/16	Caller	Jeff	i do n't believe that ah we need to adjust our economy and get all bent out of shape
02/03/16	Caller	John[5]	now now remember that our economy compared to many other world econo
26/03/16	Host/Tall	Hayden Rickarson	ason why they have n't done it is that it has kept our economy going when other countries have had
02/03/16	Caller	John[5]	compared to many other world economies and ah our economy is a grain of sand in the sahara compa
19/02/16	Host/Tall	Bruce Russell	is the backbone of the economy for long and all our eggs are basically been in the dairy basket have
20/03/16	Host/Tall	Gary Denvir	our economy 's run however we rely heavily on our exports
16/02/16	Caller	Beryl	you know how much can our infra - infrastructure take and how much can th
25/03/16	Host/Tall	Bruce Russell	uilding and therefore it was a something to take our mind off
19/02/16	Host/Tall	Bruce Russell	d with because that 's what he wanted to do take our minds off things
20/03/16	Host/Tall	Gary Denvir	we are in in reasonable shape um in terms our of of the way the way our economy 's run howe
21/02/16	Host/Tall	Joe Reid	my who cares about i mean all we care about is our only little economy here
28/02/16	Host/Tall	Gary Denvir	ame policy by by us doing it first its again with our our small economy trying to drive ah the the re
28/02/16	Host/Tall	Gary Denvir	policy by by us doing it first its again with our our small economy trying to drive ah the the rest of

¹⁵⁸ Close analysis of utterances, which involved listening to utterances in context, revealed only one case of *the economy* on calls that was clearly not the national economy, in that case it was in the context of discussing causes of the Arab Spring (“... before anybody thought of um what's the economy like”).

Table 6.7 Concordance of talkback call speakers mentioning *we* in context of *economy* (20 random rows)

09/03/16	Caller	Claudette	a couple of calls back about all the extra money <i>we</i> 're paying because <i>we</i> 're such a small <i>economy</i>
16/02/16	Caller	Beryl	much can the can the taxpayer afford that cause <i>we</i> 're a low-wage <i>economy</i> and all these good doe
16/02/16	Host/Talk	Tony Amos	because people <i>we</i> do n't save the money when <i>we</i> get paid more <i>we</i> spend it do n't <i>we</i>
28/02/16	Host/Talk	Gary Denvir	<i>we</i> end up shooting ourselves in the foot because <i>we</i> turn tourists away and that impact impacts us n
28/02/16	Host/Talk	Gary Denvir	h the the rest of the world in the same direction <i>we</i> end up shooting ourselves in the foot because <i>we</i>
27/02/16	Host/Talk	Tim Beveridge	s they 've got us through you know <i>we</i> 've been <i>we</i> 've been praised for the way our <i>economy</i> 's bee
26/02/16	Host/Talk	Joe Reid	they were negative geared and <i>we</i> were <i>we</i> were going in the right direction and t
25/02/16	Host/Talk	Leighton Smith	an internal <i>economy</i> however <i>we</i> do trade and <i>we</i> need to trade <i>we</i> need desperately to trade
16/02/16	Host/Talk	Tony Amos	verybody needs a pay rise actually and because <i>we</i> live in this low-wage <i>economy</i> and ya know <i>we</i>
20/03/16	Host/Talk	Gary Denvir	of the way the way our <i>economy</i> 's run however <i>we</i> rely heavily on our exports
07/03/16	Caller	Richard	of the <i>economy</i> and a positive aspect about who <i>we</i> are as a country to get a story like that and you
15/02/16	Caller	Anne	ilate stuff and <i>we</i> are a low-wage <i>economy</i> and <i>we</i> ah <i>we</i> a lot of people are feeling um less um mo
07/03/16	Caller	Richard	and at a time when that ah <i>we</i> can ill afford to ah to lose tourism that it 's ah st
19/02/16	Host/Talk	Bruce Russell	<i>we</i> 've relied on dairying as the backbone of the <i>ec</i>
18/02/16	Host/Talk	Gary Denvir	the the reverse of that is when <i>we</i> when <i>we</i> ah fall over and do n't win the world c
26/03/16	Host/Talk	Hayden Rickar	is that <i>we</i> <i>we</i> have this false <i>economy</i> because <i>we</i> are letting
25/02/16	Host/Talk	Leighton Smith	is such a thing as an internal <i>economy</i> however <i>we</i> do trade and <i>we</i> need to trade <i>we</i> need desperat
18/02/16	Host/Talk	Gary Denvir	the the reverse of that is when <i>we</i> when <i>we</i> ah fall over and do n't win the world cup <i>we</i> all
26/03/16	Host/Talk	Hayden Rickar	is that <i>we</i> <i>we</i> have this false <i>economy</i> because <i>we</i> are lett
27/02/16	Host/Talk	Tim Beveridge	you know <i>we</i> 've heard talk that the new zealand <i>economy</i> ha

In the last section I suggested that use of *economy* to refer to other national economies and the world economy also reinforced the nation-centric nature of *economy*-talk, especially because this was often related to New Zealand's economy in terms of negative effects or comparisons. On talkback calls there appeared to be a tendency to reference other national economies (and the *world/global* economy) more than what was found in the parliamentary study and, where other national economies were raised, these were discussed both in relation to New Zealand (as a comparison or analogy or problem) or in their own right, as current events. From the concordance of *economy* I identified 9 instances (7.9%) where talkback speakers used *economy* to refer to other nation's economies.¹⁵⁹ The frequent reference to other national economies and the global economy was, likewise, observed in the wider data-set of talk radio utterances.¹⁶⁰ News items and discussions between hosts and experts, media representatives and others often referenced the economy of other nations as part of reporting and discussing current events. For example, in the lead-up to the Brexit vote and the US elections

¹⁵⁹ In some of these instances, *economy* was qualified by the name of another nation-state e.g. *Australian economy* or *Russia's economy*. However, there were other examples where the referent was clearly some other nation's economy, for existence the use of *their economy*, and this was confirmed by listening to more of the audio context of the call.

¹⁶⁰ I did not count all instances in parliament, but I did do pair-wise comparisons. For example, there were 9 instances of *Chinese economy* in the wider talk radio data, and this is an order of magnitude more frequent than it was mentioned in parliament.

there were news stories discussed by hosts, media representatives and others. Brexit was also discussed on two calls and the US election on one call. What was surprising when comparing talkback calls with the wider context of talk radio discourse was the degree of commonality of the specific nations discussed. The nations referred to on talkback calls, specifically Australia, Britain, France, Iceland, Russia, and the United States, overlapped with those that were discussed in the broader context of talk radio: Australia, Brazil, Britain, China, Fiji, France, Iran, Ireland, Russia, and the United States. This overlap reflected that people were speaking on talkback calls were on occasion attending to the same stories featured in news reports and discussed by hosts, experts and others. However, the overlap also reflects people orienting to the same national economies that news reports and other talk radio discourse regularly orient to when discussing New Zealand's economic relationships (e.g. Australia and China) and the global economy (e.g. China and the United States).

People speaking on talkback, as in parliament, when they used *economy* were often orienting to government in some way. I suggested that *economy*-talk was implicitly also *government*-talk and that the economy is integrally linked to those who have the power to act on it. In parliament, the collocation *economy+government* was used in a quarter of sentences by speakers from the two major parties. This finding from the parliamentary study could be explained away as an artefact of a study of an institutional setting oriented to debates about governments and their action. However, in the context of talkback radio calls speakers did use the word *government* with *economy*, although as Table 6.5 indicated, not as frequently as in parliament. Although *government* was only used 8 times, speakers did reference government in other ways. The prime ministerial role is the most visible representative of a government and there was a tendency to refer to the Prime Minister John Key, either by name or title, or using the pronouns *he/his/him/they*. For example:

Newstalk ZB Call n032902/1 March 29

Bruce Russell (Host): john key must have money worries about the economy

Newstalk ZB Call n030100/1 March 1

Dell (Caller): I think (.) people can see that they (.) like him for his ah handling of the economy (1) um but when it comes to the flag thing I think (.) people can see he's gone he's going too far this time ya know and ah

In total I recorded 18 utterances (16.1%) that used *economy* where speakers were orienting to government in some overt way. In addition, even besides these overt references, much of the use of *economy* was explicitly orienting to contemporary political debates, and although not directly referenced within the utterances, was about government in a wider sense.

As the examples provided already indicate, speakers on talkback calls, as in parliament, were emphasising the agency and responsibility of government with respect to the *economy*. This applied even in this instance where the speaker asserted a laissez-faire stance:

Newstalk ZB Call n022511/1 February 25

Jonathan (Caller): but when it comes to small business (.) um which is the lifeblood of the economy (.) um particularly the rural economy (.) it is very important that um government's gotta be pretty hands off and has gotta do everything they can to ensure ah that the environment works for small business

In this example, the speaker's "hands off" stance was asserted while defining an active role for government "to ensure ... that the environment works".

Interestingly, when speakers used the pronoun *we* in relation to the nation, they implicated themselves as citizens, but also sometimes attributed powers that belong to the state as powers of the collective in relation to the economy. For example:

RadioLive Call r031410/1 March 14

Jeff (Caller): I don't believe that ah we need to adjust (.) our economy and (.) get all bent out of shape

Newstalk ZB n022102/1 February 21

Gary Denvir (Host): we wouldn't give him citizenship because he was gonna be a drain on on ah the economy because he's got a child that was gonna need um long term health care

I suggest that the explicit links that speakers were making in this instance between nation, economy, and government, reflect assumptions prevalent in use of the *economy* in general. These examples indicate people as citizens of a political community orienting to the actions of their government in

relation to the economy. This is perhaps not surprising given governments rationalise their action as engineering, directing or “managing” the economy or economic forces for the national good. But relatedly, when governments act for the economy, citizens understand they are implicated in these actions and there is evidence that this grounds the importance and controversiality of *economy*-talk.

6.4.2 From *people* to the rhetorical function of causal explanations

From the three comparisons undertaken, the word *people* emerged as a distinctive feature of the use of *economy* on talkback calls (see Table 6.5). On average *people* was used more than twice as much as in the WSC Talkback corpus and other talk radio *economy* utterances and more than three times as much in utterances mentioning *economy* in parliament.¹⁶¹ It was also a relatively frequent word in the concordance of *economy*, occurring in one in every five call utterances. In total it was used 32 times by 17 speakers. The utterances were split evenly between hosts (16 utterances) and callers (16 utterances). Of the 17 different speakers, 8 were hosts and 9 were callers.

That these “lay” kinds of conversations featured more prominent use of *people* with *economy* suggested a more people-centred, or “populated” (Billig, 1994), kind of thinking. In approaching analysis using the concordance (see Table 6.8) and listening to the audio context I was interested in who exactly these *people* were. There were a number of functions that *people* were serving in these discussions, including as “reference groups” (Edelman, 1977, p. 29). For example:

i think people can see they like him for his ah handling of the economy um but ... i think people can see he's gone he's going too far this time

mind you they say they say unemployment is down and and we've through the global we've done a reasonable job of managing the economy by by international by by by people's reckonings

In the first example, the speaker uses *people* two times to indicate a community of concern and an audience of reasonable thinking people. In the second example, *people* were positioned as a source of authority for a statement that was independent of the speaker as the host disagrees with the caller.

¹⁶¹ It should also be noted, from comparing the WSC Talkback subcorpus with the rest of the WSC, that the word *people* is used twice as much in talkback than in other kinds of spoken New Zealand English.

Table 6.8 Concordance of talkback call speakers mentioning *people* in the context of *economy* (all rows)

16/02/16	Host/Talk	Tony Amos	anyone earned more the country benefits because <i>people</i> we do n't save the money when we get paid mo
18/02/16	Host/Talk	Gary Denvir	confidence goes up ah jobs are created because <i>people</i> are feeling so confident about um things so it's
18/02/16	Host/Talk	Gary Denvir	to this pall and the <i>economy</i> plummets because <i>people</i> people go into this ridiculous ah depression ove
27/02/16	Host/Talk	Tim Beveridge	aging the <i>economy</i> by by international by by by <i>people</i> 's reckonings
02/03/16	Caller	John[2]	s putting money into paying teachers to educate <i>people</i> that money all goes into the community
15/03/16	Host/Talk	Bruce Russell	his government 's the one that encouraged <i>people</i> to do this when they came into office because t
02/03/16	Host/Talk	Mark Dye	at means there 's more money floatin around for <i>people</i> to buy more goods you know which has flow of
28/03/16	Host/Talk	Tim Roxborough	so they 're employing almost forty <i>people</i> now which is great you know in in a town which
15/02/16	Caller	Cath	i think the idea of um giving <i>people</i> the money is to try to get more money into the
17/03/16	Caller	Graham[2]	a please tax us some more so that we 'll be good <i>people</i>
21/02/16	Host/Talk	Joe Reid	and and quite often i hear <i>people</i> go oh look let 's talk about the world <i>economy</i>
19/02/16	Caller	James	i mean <i>people</i> have to remember these people are coming they
07/03/16	Caller	Sam	Labour 's in power they keep on bringing more <i>people</i> into the government departments and then the u
02/03/16	Host/Talk	Mark Dye	fects to businesses they 're able to employ more <i>people</i> etcetera etcetera
15/02/16	Caller	Cath	rough and create more jobs and you know more <i>people</i> would spend and it would revitalise the <i>economy</i>
01/03/16	Host/Talk	Bruce Russell	alot of <i>people</i> are are are actually in this boat with a low-wage
22/02/16	Caller	Warrick	look at the flood of <i>people</i> that it 's had and ya know what it 's done to brit
15/02/16	Caller	Anne	are a low-wage <i>economy</i> and we ah we a lot of <i>people</i> are feeling um less um more -LSB- inaudible -E
17/02/16	Host/Talk	Mark Sainsbury	ing the rest of the <i>economy</i> and there 's a lot of <i>people</i> in that in that position
26/02/16	Caller	Mark	onomy and how much pressure that will put on <i>people</i>
18/02/16	Host/Talk	Gary Denvir	pall and the <i>economy</i> plummets because people <i>people</i> go into this ridiculous ah depression over a gam
23/03/16	Host/Talk	Tim Beveridge	ally by immigration but what 's it doing for the <i>people</i> who who live here in terms of being priced out
16/02/16	Host/Talk	Bruce Russell	i just wonder um whether the <i>people</i> who have refused to hear a word against the pri
01/03/16	Caller	Mark	up people 's wages there 's gon na they 're these <i>people</i> do n't save their money this moneys going to ge
01/03/16	Caller	Mark	and the money they pay these <i>people</i> will get fed back into the <i>economy</i> so you 'll ha
19/02/16	Caller	James	i mean people have to remember these <i>people</i> are coming they 're spending huge amounts of r
01/03/16	Caller	Dell	i think <i>people</i> can see that they like him for his ah handling of
01/03/16	Caller	Dell	y um but when it comes to the flag thing i think <i>people</i> can see he 's gone he 's going too far this time
18/02/16	Host/Talk	Gary Denvir	ood for the for the for the <i>economy</i> because um <i>people</i> 's confidence goes up business confidence goes
01/03/16	Caller	Mark	if you raise up <i>people</i> 's wages there 's gon na they 're these people do
19/02/16	Host/Talk	Bruce Russell	if you believe what <i>people</i> said initially when he brought it up that he wou
22/02/16	Caller	Warrick	in 's <i>economy</i> in terms of having to put up with <i>people</i> from countries

However, the most common use of *people* was as actors in causal explanation and this usage featuring in over half of the examples. The following two utterances illustrate this use of *people* with *economy*:

winning the rugby tends to um be very good for the for the for the economy because um people's confidence goes up business confidence goes up consumer confidence goes up ah jobs are created because people are feeling so confident about um things so it's actually the spin-off is um i- is quite odd

if you raise up people's wages there's gonna they're these people don't save their money this moneys going to get directed directed straight back into the economy anyway so it's gonna be an economic boost for the whole country you know

In the first of these examples the host grounds their statement in expectations about New Zealand national identity, because *people* in New Zealand love rugby so much, when the national team wins

the positive psychological effects of this are manifest in positive economic effects. The second of these examples is an example of a common argument in the examples of *economy* from talkback calls, which is the collective benefit of increasing people's incomes. One third of examples of *people* were in the context of this kind of argument.

Analysing the use of *people* revealed a kind of *economy*-talk that did not emerge prominently from analysis of parliamentary rhetoric: a concern with causal explanation. In reviewing the results of comparative analysis, there were other words that emerged that also reflected this kind of causal talk. These include *because*, *by*, *goes* (and word forms of *go*), *money* and verbs related to *money* (i.e. word forms of *pay*, *spend*). As can be seen in Table 6.9, speakers were using *because* in the context of causal statements involving *economy*. Similarly, the use of *by* (see Table 6.10), apart from a few exceptions (e.g. *by all accounts*, *by people's reckonings*), indicated a causal mechanism (e.g. *by immigration*, *by giving everyone*). The use of *goes* and other word forms of *go*, particularly in the forms *gonna* and *going to*, were often used to indicate effects (e.g. "unemployment goes down and then the economy goes more smoother" or "he was gonna be a drain on on ah the economy" or "doesn't know what the impact is going to be ah on the new zealand economy").

The word *money* was identified as over-represented against the reference corpus, non-call utterances and parliamentary utterances. It was used 7 times more on average than parliament and 3 times more than in the non-calls.¹⁶² As is shown in Table 6.11 this was often in the context of word forms of *pay* and *spend*. What was interesting, were patterns of co-occurrence between *economy*, *people*, and *money*. When speakers used *people* with *economy* they also tended to use *money*, with 9 out of 16 utterances featuring *money* also featuring *people*, for example:

you're absolutely right everybody needs a pay rise actually and because we live in this low-wage economy and ya know what if we if everyone earned more the country benefits because people we don't save the money when we get paid more we spend it don't we

¹⁶² It should be noted that parliamentary speakers and newsreaders did talk about specific dollar amounts, but the interesting difference here is we are talking about the functions of *people* and *money* in particular causal explanations related to *economy*.

and then that stimulates the economy that means there's more money floatin around for people to buy more goods you know which has flow on effects to businesses they're able to employ more people etcetera etcetera

i think the idea of um giving people the money is to try to get more money into the economies to because the very very low um inflation rates are an indication that something you know is going really wrong with the circulation of money within the economy

Now, on one level the emphasis on *people* and *money* could be explained as a kind of lay inference from observables or tangibles that is close to the kinds of circular flow diagrams that inhabit introductory economics texts. In the model that could be extrapolated from talkback calls, people are paid and they spend, and from this movement of money there are beneficial emergent effects for the collective. With the apparent focus on consumption and backgrounding of production, investment and profit, this could be criticised for what it misses when compared with the introductory economics text. But, the introductory text itself could be criticised for what it misses (T. Jackson, 2009, p. 90).

Table 6.9 Concordance of talkback call speakers mentioning *because* in the context of *economy* (all rows)

20/03/16	Caller	Ross		<i>because</i> at the moment um france second biggest <i>economy</i>
21/02/16	Host/Talk	Gary Denvir	he was gon na be a drain on on ah the <i>economy</i>	<i>because</i> he 's got a child that was gon na need long term
04/03/16	Host/Talk	Bruce Russell	and do you think he knows it 's in the red	<i>because</i> he keeps telling us the <i>economy</i> 's in great shap
21/02/16	Host/Talk	Gary Denvir	we would n't give him citizenship	<i>because</i> he was gon na be a drain on on ah the <i>economy</i>
02/03/16	Caller	John[2]	provided um it 's actually adds to the <i>economy</i>	<i>because</i> if the government 's putting money into paying
30/03/16	Caller	John[3]	i mean it kills your own <i>economy</i> by doing that	<i>because</i> it certainly kills the person who 's trying to achi
26/03/16	Host/Talk	Hayden Rickar	know the the economies have s - just about died	<i>because</i> of immigration we have continued on
18/02/16	Host/Talk	Gary Denvir	onsumer confidence goes up ah jobs are created	<i>because</i> people are feeling so confident about um things
18/02/16	Host/Talk	Gary Denvir	all go into this pall and the <i>economy</i> plummets	<i>because</i> people people go into this ridiculous ah depress
16/02/16	Host/Talk	Tony Amos	ve if everyone earned more the country benefits	<i>because</i> people we do n't save the money when we get p
19/02/16	Host/Talk	Bruce Russell	ething that he was then forced to go ahead with	<i>because</i> that 's what he wanted to do take our minds off
01/03/16	Caller	Selwyn ('Tm Aa	decision to shift jobs offshore you just have to	<i>because</i> the new zealand <i>economy</i> wo n't pay for certain
15/02/16	Caller	Cath	to try to get more money into the economies to	<i>because</i> the very very low um inflation rates are an indi
20/02/16	Host/Talk	Gary Denvir		well <i>because</i> their <i>economy</i> 's fallen over
15/03/16	Host/Talk	Bruce Russell	ed people to do this when they came into office	<i>because</i> there was gon na be such a bright future so if y
02/03/16	Caller	John[2]	y by having this education as provided by them	<i>because</i> they 're actually adding to the <i>economy</i>
27/02/16	Host/Talk	Tim Beveridge	migration also does build the <i>economy</i> as well	<i>because</i> they come in hopefully with money as well
18/02/16	Host/Talk	Gary Denvir	um be very good for the for the for the <i>economy</i>	<i>because</i> um people 's confidence goes up business confi
09/03/16	Caller	Claudette	ls back about all the extra money we 're paying	<i>because</i> we 're such a small <i>economy</i> and this has been
26/03/16	Host/Talk	Hayden Rickar	is that we we have this false <i>economy</i>	<i>because</i> we are letting in a huge amount of of of immigr
16/02/16	Host/Talk	Tony Amos	y right everybody needs a pay rise actually and	<i>because</i> we live in this low-wage <i>economy</i> and ya know
28/02/16	Host/Talk	Gary Denvir	ection we end up shooting ourselves in the foot	<i>because</i> we turn tourists away and that impact impacts u

Table 6.10 Concordance of talkback call speakers mentioning *by* in the context of *economy* (all rows)

24/02/16	Host/Talk	Alison Mau	at the the management of the economy has been <i>by</i> all accounts quite good
27/02/16	Host/Talk	Tim Beveridge	b of managing the economy by by international <i>by</i> by by people 's reckonings
02/03/16	Caller	John[2]	they can actually boost the economy <i>by</i> by having this education as provided by them b
27/02/16	Host/Talk	Tim Beveridge	one a reasonable job of managing the economy <i>by</i> by international by by by people 's reckonings
27/02/16	Host/Talk	Tim Beveridge	f managing the economy by by international by <i>by</i> by people 's reckonings
28/02/16	Host/Talk	Gary Denvir	everybody should introduce the same policy <i>by</i> by us doing it first its again with our our small
30/03/16	Caller	John[3]	ah i mean it kills your own economy <i>by</i> doing that because it certainly kills the person v
22/03/16	Caller	George	rk week and massively stimulated the economy <i>by</i> giving everyone a bit more time off by paying a
22/03/16	Caller	George	l of his workers more and by um yeah basically <i>by</i> giving them more time to spend their money
09/03/16	Host/Talk	Gary Denvir	ly when talking about um the economy of scale <i>by</i> having a larger populace things would come do
02/03/16	Caller	John[2]	they can actually boost the economy <i>by</i> <i>by</i> having this education as provided by them beca
23/03/16	Host/Talk	Tim Beveridge	ayed by you know to a certain extent financially <i>by</i> immigration but what 's it doing for the people
27/02/16	Host/Talk	Tim Beveridge	e a reasonable job of managing the economy <i>by</i> <i>by</i> international by by by people 's reckonings
15/02/16	Caller	Anne	s um more -LSB- inaudible -RSB- and affected <i>by</i> it
22/03/16	Caller	George	economy <i>by</i> giving everyone a bit more time off <i>by</i> paying all of his workers more and by um yeah
27/02/16	Host/Talk	Tim Beveridge	anaging the economy by by international by by <i>by</i> people 's reckonings
17/02/16	Host/Talk	Duncan Garner	eh i mean we are not having a good economy <i>by</i> sitting on motorways simple as that
02/03/16	Caller	John[2]	onomy by by having this education as provided <i>by</i> them because they 're actually adding to the eco
22/03/16	Caller	George	time off by paying all of his workers more and <i>by</i> um yeah basically by giving them more time to
28/02/16	Host/Talk	Gary Denvir	everybody should introduce the same policy by <i>by</i> us doing it first its again with our our small eco
23/03/16	Host/Talk	Tim Beveridge	at the the econ - economy is sorta being buoyed <i>by</i> you know to a certain extent financially by imm

Table 6.11 Concordance of talkback call speakers mentioning *money* in the context of *economy* (all rows)

22/03/16	Caller	John[4]	when ah when a person 's born you have to add money to the economy to make the system work other
22/03/16	Caller	John[4]	yeah cause money gets added to the economy when ah when a per
09/03/16	Caller	Claudette	he man a couple of calls back about all the extra money we 're paying because we 're such a small econo
29/03/16	Host/Talk	Bruce Russell	john key must have money worries about the economy
02/03/16	Host/Talk	Mark Dye	stimulates the economy that means there 's more money floatin around for people to buy more goods yo
15/02/16	Caller	Cath	m giving people the money is to try to get more money into the economies to because the very very lov
01/03/16	Caller	Selvyn	and those employees were able to spend more money into the economy and therefore all the business
19/02/16	Caller	James	e are coming they 're spending huge amounts of money in the local economy here
15/02/16	Caller	Cath	ow is going really wrong with the circulation of money within the economy
15/03/16	Host/Talk	Bruce Russell	recting outfits that are making a heck of a lot of money that should be contributing to the country 's eco
02/03/16	Caller	John[2]	e economy because if the government 's putting money into paying teachers to educate people that mor
02/03/16	Caller	John[2]	oney into paying teachers to educate people that money all goes into the community
01/03/16	Caller	Mark	and the money they pay these people will get fed back into the
15/02/16	Caller	Cath	i think the idea of um giving people the money is to try to get more money into the economies
16/02/16	Host/Talk	Tony Amos	untry benefits because people we do n't save the money when we get paid more we spend it do n't we
01/03/16	Host/Talk	Bruce Russell	a low-wage economy in new zealand where the money is stretched to pay the rent to pay getting to wor
01/03/16	Caller	Mark	e 's gon na they 're these people do n't save their money this moneys going to get directed directed strai
22/03/16	Caller	George	sically by giving them more time to spend their money
15/02/16	Caller	Cath	and it was hoped that i think money from that was pumped into the um global econo
27/02/16	Host/Talk	Tim Beveridge	ny as well because they come in hopefully with money as well

These explanations involving *people* and *money* were just one example of the use of causal talk. However, what is clear from examining the concordances and listening to calls is that this was not just causal explanation for the sake of it. Explanation was a resource in the arguments that people

were making. Suggesting, for example, that increasing consumptive economic activity would be beneficial for the collective *economy* was in the context of hosts and callers arguing for paying people a living wage, or raising the minimum wage, or addressing the problem of a *low-wage economy* (which I discuss in more detail in the next section). This is not to say that callers and hosts were not arguing for adequate incomes based on other grounds (e.g. appeals to fairness or need), but these would only be captured if the word *economy* had been used. This does inform our understanding of the use of *economy* because, even when speakers drew on these kinds of causal arguments, speakers were typically appealing to the prosperity of the collective in the context of debates concerning their political community. This is an example of the embedding move proposed in Chapter 5 where the speaker's abstractions are grounded in the nation. In this case, a causal story involving an abstracted *people* is grounded in the collective "us" of *our economy*.

Before concluding this section, I will briefly discuss the relevance of the hosts authority and power in relation to this causal talk. Although both hosts and callers engaged in causal talk, hosts appeared more experienced with the use of the economy when speaking outside the context of talkback calls. Hosts, in using *economy* in the wider context of talk radio, repeatedly demonstrated their familiarity with current events, the ability to engage with expert analysis and opinions, the ability to use economic statistics and jargon, and the ability to editorialise at will. In the context of talkback calls, there were multiple examples where hosts used their authority with respect to causal explanations to counter the arguments of callers. In one revealing example, the caller aimed to weigh in on the merits of a Universal Basic Income:

Newstalk ZB Call n032210/1 March 22

George (Caller) ... so I was looking into this a while ago um and I found out this thing about henry ford in the 1920s (1) he started the five day work week (.) and massively stimulated the economy by giving everyone a bit more time off by paying all of his workers more (.) and by um yeah basically by giving them more time to spend their money (1) so this would effectively do the same thing but in a different way it'd be giving more money to people to go out and spend

Leighton Smith (Host): no it doesn't achieve the same thing (4)

G: um (1) I'm <laughing> sorry this is my first time calling I'm not exactly good at this <laughs>

LS: Well you're supposed to say (.) you're expected to say why not

G: yeah well why not <laughing> like

The caller in this instance was clearly surprised at the outright dismissal of their argument with no reasoned refutation from the host. There was a long pause before they nervously laughed and asserted their inexperience. The host rather than justifying their dismissal of the caller's comment, instead replied by suggesting what the caller should say. The suggested "why not" positioned the host as confident and authoritative in being able to provide the answer. Rather than backing his claim that "it doesn't achieve the same thing", the host then justified his disagreement by drawing a qualitative distinction between the actions of a private firm and the kind of collective action required for a Universal Basic Income.¹⁶³

This example demonstrates people coming up against interlocutors who were confident in their authority with respect to this economic kind of talk. This indicates power dynamics related to economic knowledge that transcend the situation of a talkback call. That people were willing to engage in a kind of causal discourse staked out by experts, especially given the risks of being corrected by a host, is revealing.

6.4.3 Key Issues and the context of talk radio and party politics

The prominent use of the words *low-wage* and *immigration* indicated the importance of key issues during the period analysed. Closer analysis of the concordance lines and audio context of calls revealed that speakers were frequently discussing and debating a range of policy-related domains, from problems related to tourists to a referendum about New Zealand's flag. In this section I will concentrate on the three most frequently discussed issues: wages and work, immigration, and dairy.

¹⁶³ There was a further example of the power of the host later in this same call when the host advanced an argument that technological change would drive new business opportunities and related new employment opportunities. The host used the example of the telecommunications industry as an industry that exemplified his argument. By chance the caller was an installer in the telecommunications industry and explained how his job was recognised to be one that would disappear in the short term once the necessary infrastructure was in place. The caller's appeal to their own direct experience refuted the claims of the host about the industry they had singled out to make their point. At this point the host completely changed the subject and soon ended the call.

This analysis also situates talkback calls in the wider context of talk radio and demonstrates some direct connections between party politics, talk radio, and talkback talk.

Before discussing the specific issues, I will describe how talk radio discourse related to the economy obviously orients to the politics and speech of parliamentary parties. MPs were frequent speakers in the sample of talk radio utterances. 11 speakers were sitting MPs at the time of the study and they were represented in 25 separate utterances containing *economy*. There were 12 examples of MPs being interviewed by hosts as part of the talk radio shows, often during the peak morning and afternoon hours. There were 7 examples of MPs speaking in the context of the news, and two of these utterances were repeated. However, news broadcasts included the utterances of MPs both in pre-recorded audio recordings, but also in the form of reported speech, in the form of quotes read by newsreaders (e.g. “Nathan Guy says dairy farms play a vital role in sustaining New Zealand's provincial economy”). Of the 136 newsreader utterances featuring *economy*, 28 (20.6%) specifically referencing MPs by name or position or parliamentary parties, and 25 of these reported a spoken utterance or written statement. References to the statements of MPs or recorded soundbites were repeated on occasion. The hourly (and sometimes more frequent) repetition of news segments, and the format of commentary and interviews, provided a way for utterances to be repeated and discussed and increased the likely audience of MPs’ statements.

It is worth pointing out that this study provides some preliminary support for claims made in Chapter 5, regarding the relevance of politicians’ utterances beyond the specific audience in parliament (and other contexts). In Chapter 5 I suggested that although parliamentary debates are clearly a specific kind of institutional discourse involving political elites, that speakers in parliament are still orienting to an audience outside and that they are aware that their speeches may be reproduced or discussed in the media. The audio corpus data did illustrate the reproduction of a significant speech in parliament, as well as commentary and discussion about the speech by hosts and

callers.¹⁶⁴ Multiple hosts and callers referred to a specific speech by a member of parliament, Green MP Gareth Hughes, which was controversial because it criticised and ridiculed the prime minister (Hughes, 2016). I observed the audio of the speech being played and the text read by a host and I observed it being referred to by two callers on talkback calls.¹⁶⁵

This is not to exaggerate the importance of parliamentary speech, but there was further evidence that specific important speeches by prominent MPs, regardless of their setting, were topics for discussion. In another instance a political journalist discussed Finance Minister Bill English's "first major economic speech of the year" with the hosts of a talkback show. These examples indicate that speeches may be salient beyond their immediate context because of their controversiality or because of the status of the speaker and the situation of the speech. Additional research is warranted on how often and why MPs' speeches are reproduced in the media and whether or how MPs are explicitly orienting their speeches to an imagined audience outside the setting in which it was delivered.

6.4.3.1 Wages and work

As discussed in the previous section, there was a wider context to discussions about the *low-wage economy*. As noted, there was a tendency to talk about *people* and *money* in relation to debates about the wider issues related to wages and work and to justify these in terms of the positive emergent benefits of people spending more money. People used *economy* in the context of discussions about raising the minimum wage, a living wage, and a basic income. Interestingly, analysis of the use of *economy* on talk radio more generally revealed the importance of party politics in setting the agenda for talkback discussions about a basic income. On the 23rd and 24th of March 2016 the Labour party held a conference: *The Future of Work*. During coverage of the conference on talk radio the idea of a Universal Basic Income was discussed during interviews with MPs from the Labour party and two international economists who had spoken at the conference. The idea of a basic income was

¹⁶⁴ The speech was heard being discussed and played while listening to the extended context for instances of people using *economy* on talkback calls. The speech itself did not mention *economy*, although callers did discuss it on calls where they mentioned *economy*.

¹⁶⁵ There was also one instance of a caller who referred to a statement by an MP in parliamentary question time, and the specificity of their comments indicated they had watched it via a live broadcast.

consequently discussed, primarily negatively, by hosts in monologues and debated in interviews and was discussed on 3 talkback calls.¹⁶⁶

The use of *low-wage* can be understood in relation to ongoing debates about the challenges of wages and work, but are revealing in their own right in relation to a specific use of *economy* that resonated beyond talkback. Speakers' use of *low-wage*, which was identified as distinctive from comparisons with the reference corpus, represents a distinct aspect of this recurring pattern of questioning related to wages and work. Multiple speakers on talkback calls used *low-wage economy*, three times by callers and twice by hosts. In the wider context of talk radio speakers also used *low-wage* 7 times (5 times by hosts, once by a politician, once by a guest). It is useful to show the concordance with this wider context (see Table 6.12). It is compelling that across different speakers, including people on calls, there was this repeated usage of *we* in variations of *we are a low-wage economy*. This way of representing the kind of economy is interesting, and it suggests the kind of embedded way of representing the economy discussed in the previous chapter. Speakers were positioning the *low-wage economy* as a problem for everyone in their political community. It should be noted that the use of *low-wage* with *economy* also resonated with patterns used by speakers in parliament, where *low-wage* was used 108 times in the context of *economy* and in over a third of cases with *we* in a close collocation span.¹⁶⁷ The term was typically used by opposition parties to express concern and criticise the government¹⁶⁸ and these functions were mirrored by speakers on talkback calls, with speakers orienting to a kind of economy in which people struggled to get by as a problem for both people and the polity and something to be collectively addressed, but it was also used in the

¹⁶⁶ It should be noted that a host also read an editorial on the second day that data was captured (February 15), which discussed the possibility of a basic income in Australia. The host's quoting of the article and his subsequent commentary was observed, as was a talkback call that attempted to counter his antagonism for the idea. The callers' comments on commencing the call connected her call to the debate that the host had tried to establish in reading the article. The only other calls related to a basic income cluster around the date of the Labour conference and the news coverage and commentary that was associated with this.

¹⁶⁷ The collocation *low-wage+economy* was not a particularly strong pattern of collocation. It was ranked 583 by LogDice across the entire corpus (LogDice was 7.1) and was ranked highest for Labour at 307. It was not identified in the key collocates analysis as especially important at a specific point in time.

¹⁶⁸ In parliament *low-wage economy* was primarily used by opposition parties rather than governments. Likewise, in the context of parliament *high-wage economy* was typically used to denote the kind of economy that was aspired to, but typically as the kind of economy the government was failing to deliver.

context of other debates as an argument against action (e.g. “can the taxpayer afford that cause we’re a low-wage economy” was in relation to debates about immigration).¹⁶⁹

Table 6.12 Concordance of talk radio speakers mentioning *low-wage* in the context of *economy* (all rows)

01/03/16	Host/Talk	Mark Sainsbury	conomy we're a first world country but we're a <i>low-wage economy</i>
27/03/16	Other	Kaine Thompson	ly addressed the fundamentals that we've got a <i>low-wage economy</i>
16/02/16	Caller	Beryl	n the can the taxpayer afford that cause we're a <i>low-wage economy</i> and all these good doers
16/02/16	Host/Talk	Duncan Garner	do we just need to accept that we're a <i>low-wage economy</i> and the rich are doing really well and
15/02/16	Caller	Anne	ow it takes time to assimilate stuff and we are a <i>low-wage economy</i> and we ah we a lot of people are feeli
16/02/16	Host/Talk	Tony Amos	s a pay rise actually and because we live in this <i>low-wage economy</i> and ya know what if we if everyone e
16/02/16	Host/Talk	Duncan Garner	ouple of hours on the show is that we are still a <i>low-wage economy</i> are n't we
01/03/16	Host/Talk	Bruce Russell	of people are are are actually in this boat with a <i>low-wage economy</i> in new zealand where the money is st
29/03/16	Caller	Ray	the <i>low-wage economy</i> is producing the cash <i>economy</i>
23/02/16	Host/Talk	Duncan Garner	or are we such a <i>low-wage economy</i> that how on earth can we put money a
01/03/16	Host/Talk	Mark Sainsbury	i mean we're a <i>low-wage economy</i> we're a first world country but we're
29/03/16	Politician	Winston Peters	ment has allowed us to be ah heading towards a <i>low-wage</i> low-skilled <i>economy</i> and to ensure that there is

What is also compelling about the use of *low-wage economy* is that, not only does it resonate in talk radio and parliamentary speech, but the presence of this usage foregrounds the absence of other qualifiers that we might have expected. The repeated use of the qualifier *low-wage* was the only repeated usage of this type across calls and multiple speakers. Remembering that in parliament, *strong/stronger/growing/competitive/two-speed/productive/smart/green* were frequently used to qualify *economy*, these patterns of use were all absent from talkback calls. Even more surprising was the complete absence of these words from any of the talkback call utterances mentioning *economy*. This indicates some clear differences between the use of *economy* by talkback callers and speakers in parliament. As already suggested in Chapter 5, the use of these qualifiers was either to celebrate or critique the government’s economy (e.g. *strong* vs *two-speed*) or to represent a political parties vision for their economy (e.g. *smart*, *green economy*). In the setting of talkback calls, people were instead orienting to a much richer shared understanding of the economy understood as problematic in the present.

What is interesting about the use of *low-wage*, is that it demonstrates the relevance of a specific usage between contexts (talkback calls, talk radio, and parliament). It should be noted that there were no examples of use of *low-wage* or possible variations (i.e. *low wage*, *lowwage*) in the

¹⁶⁹ There is a deeper critical importance to the use of *low-wage economy*, in that issues of income inequality between people and between nations were typically backgrounded.

WSC, whether in the context of *economy* or not. The repeated use of *low-wage economy* in talkback calls, talk radio and parliament is not something that can be understood as springing forth from individual's cognitions about the economist's domain. Instead, this distinct linguistic pattern of use represents a socially-shared, political way of representing the economy and indicates that people were questioning this kind of economy that was not adequately providing for people.

6.4.3.2 Immigration

Talkback as a medium does provide a forum for xenophobic and anti-migrant sentiment. As already discussed, talkback has a reputation as a forum for racist and bigoted views (McMillan, 2005) and has been studied precisely to understand racist thinking (Hanson-Easey & Augoustinos, 2017). This was evident in calls. To illustrate, in one call about Brexit the caller discussed “having to put up with people from countries” and “the flood of people”. The use of “flood” in this instance reproduced a metaphor that corpus linguists have identified as a way groups of refugees, asylum seekers and migrants have been problematised in the UK press (Baker et al., 2008). As examples below also indicate, this metaphor was used by multiple speakers on talk radio in New Zealand. Another caller focused explicitly on two nations as responsible for New Zealand's economic problems, acknowledging his lifelong distrust of China and Russia, and stating that “we're gonna be run by chinamen”.¹⁷⁰

Given these examples, that *immigration* was a keyword that emerged from comparisons with the reference talkback corpus and parliamentary utterances was perhaps unsurprising. The word *immigration* was used with *economy* 6 times in 6 separate utterances in the context of talkback calls. The four speakers using *immigration* were all hosts. But, listening to call audio, and especially the start of calls, there were several callers who indicated that immigration was the issue they wanted to discuss. Some utterances featuring *economy*, although not explicitly referencing *immigration* (or *immigrants* or other forms of reference), were part of debates about immigration. For example, one caller who stated:

¹⁷⁰ Interestingly, the host in this instance, perhaps contrary to expectations about talkback hosts in general, corrected the caller, stating: “the chinese, or chinamen you call them, we call them the Chinese community”.

the national government are (.) just (.) i don't know they're they're they're the economy around our country is (.) is lowering

was criticising *the national government*, but this was in the context of criticising the government's failure to address the hardships of New Zealanders, which she suggested was the result of government's failure to address what she considered was problematic immigration.

The previous example indicated a speaker used *economy* in a discussion about immigration to emphasise the collective welfare, predicating their argument on whether the nation was better off or not. This was a recurring pattern of argument. In one call, the caller and host fundamentally agreed that immigration was a problem. The host referred to the “changing the face of New Zealand” and that “we are being flooded with so many people from overseas”, with the caller also remarking on “these floods of people coming in”. Both host and caller initially focused on the migrants and specifically the numbers of migrants themselves as problematic. However, a few turns later the host reframed the criticism of immigration, from one that could be challenged as prejudiced or racist, to instead suggesting immigration was a failed economic policy pursued by the government, stating that: “immigration was actually meant to boost the economy”. The host, in shifting the focus of the discussion, appeared to attempt to shift conversation to more legitimate kind of critique.

This pattern was repeated in another call, in which the caller commented early in her call that “the face of New Zealand is changing and changing very fast” and stated that she was “concerned about too many immigrants coming into New Zealand”. In this call though, the host immediately disagreed with the caller's comments. To counter the host's objection that “we are a nation of migration” the caller invoked the *low-wage economy*, stating:

you know how much can our infra- infrastructure take and how much can the can the taxpayer afford that cause we're a low-wage economy and all these good doers

The caller redefined the nature of disagreement, from a focus on her views, which the host had repeatedly suggested were backward and inconsistent with the history of New Zealand, to one of the material limits of the political community.

I am suggesting that these examples indicate that speakers were using *economy* to appeal to a more legitimate shared grounding for views in a contentious debate, specifically the prosperity of the political community.¹⁷¹ It is also revealing that speakers in the preceding examples were basing their arguments on a view of the economy as problematic. The wider context of talk radio provided more insights in relation to this finding. Although it was a feature of news reports, discussion and commentary, there were two situations that accounted for much of the use of *immigration* and *economy* outside the context of calls.¹⁷² The first being an evening when a host tried to prompt listeners to call to discuss immigration and the economy, the second was a specific announcement by the Labour party leader.

In the first instance, the host, over a 5 hour period, repeatedly prompted callers to phone in to discuss immigration and the economy.¹⁷³ These utterances are listed for reference:

my thing about immigration sixty four thousand last year thousands and thousands in previous years and it was all going to boost our prosperity boost the economy

and now the economists are saying it's been it's a major drain on our economy and the economy is looking pretty sick and the migration the immigration hasn't done what it was predicted by the prime minister that it would do

the asb economists say this is a poor performing economy and immigration is not helping

if immigration was doing what the government said it would do boost prosperity place people in jobs boost the tax take improve the economy it isn't working

sixty four thousand came in last year thousands the years before the economy has not benefitted

immigrants um draining the country rather than improving it the economy a mess immigration which was meant to boost the economy has not been doing it

we've had thousands in previous years and we were told that this would boost the economy immigration was good for the economy

some experts are saying immigration is draining the economy that we're groaning under the weight

¹⁷¹ While these examples indicate the use of *economy* in arguing against immigration, there were examples where the speaker's argued for the collective advantage of immigration (e.g. "immigration also does build the economy as well").

¹⁷² *Immigration* was used 30 times in total across talk radio and talkback calls.

¹⁷³ This was not the only instance of a host prompting people to call about immigration and economy. For example, on another evening the host referred to immigrants four times within an hour, reporting a statement by Prime Minister John Key that "immigrants are crucial to our economy", ironically questioning "should we be concerned that it [immigration] is becoming sort of a political football?".

as people flock as the government brings them in deliberately in to boost the tax take and boost the economy

The prompts demonstrate the host elaborating the topic. In particular, the last prompt is revealing as it elaborates the positive economic rationale for encouraging immigration, while demonstrating the host problematising “them”, even as he reconstructs the problem as the government that “brings them in deliberately”. The host focuses on the government’s role in encouraging immigration, the economic promise of immigration, the scale of this immigration, the resulting lack of economic benefit, the problematic economy, and immigration as *draining the economy/country*. No talkback calls were recorded discussing immigration and *economy* on this evening, although there were people who called and discussed the problems of the economy. This does, however, indicate the host’s repeated intentional use of *economy* during an attempt to frame debate on a controversial topic.

The second example I will highlight was an announcement by the Labour party leader, Andrew Little related to immigration and the economy. On March 17th, newsreaders repeatedly referred to statements by Andrew Little on immigration and the economy 12 times. Little was interviewed by a host of a breakfast show and stated, “when the when the economy slows down as it is now then that is time to just turn the tap down a little”. As already discussed, the research has revealed the tendency for people to refer to *floods* to problematise large numbers of immigrants, a metaphor observed being used by speakers in talkback calls, and, in this respect, the choice of *tap* implied restricting this same problematic uncontrolled movement of water. The statement both challenged the government’s arguments that the economy was good and appealed to the same kind of *economy*-inoculated anti-immigrant argument that recurred on talkback calls.

The statement by Little was repeated and paraphrased by newsreaders, for example “Andrew Little says when the economy slows down it's time to turn the tap down a little on immigration”. Other statements by Little from the interview were referred to in the news and one news report rebroadcast another quote from the same interview. In the following hours, hosts offered commentary on the statement and two experts commented on Little’s claim (one, an economist, during a news slot, and the other, an economic commentator, as part of an interview). In total, on a single day, there were

23 utterances containing *economy* related to the statement by Andrew Little, from newsreaders, Little himself, and multiple hosts and experts. Although there were no instances where callers were identified saying *economy* discussed immigration on this day, I listened to one of the early shows that featured talkback calls, and the first caller began by saying:

good on mister little (.) for saying what he did (.) about time (.) I think anyone any citizen of New Zealand that's out there unemployed lookin for a job will be cheering him on

Although only circumstantial, this indicates direct connections between the utterances of a member of a parliamentary party and a member of the public and illustrates how politicians can raise topics in a way that resonates with talk radio and how talk radio itself, in reporting on and debating the statements of politicians, sets and shapes the agenda for talkback talk.

It is not possible on the basis of this research to conclude from mentions of *immigration* and *economy* that this specific collocation is meaningful beyond this talkback setting, instead it reveals a key debate on talk radio and how *economy*-talk was mobilised in these arguments. The example of debates about immigration reinforces the political and nationalist dimensions to economic ideas. In a more general sense, it provides additional support for the tendency observed in discussing wages, to avoid the contentiousness of people's situations, and to look for common ground in the appeal to *economy*.

6.4.3.3 Dairy

Hosts, newsreaders, experts and others in the context of talk radio used a word that had emerged as prominent from analysis of the 51st parliament, namely *dairy*. As in parliament, this indicated the problem of a dramatic fall in dairy prices for the economy (see Section 5.5.2.3). The word *dairy* was used at least once in 7.9% of host utterances (excluding calls) (see concordance in Table 6.13), 7.4% of newsreader utterances (see Table 6.14), and 10.8% of expert utterances (see Table 6.15) featuring *economy*. The concordances below reflect the negativity around these results and that it was a topic of concern in news reports, commentary and interviews. *Newstalk ZB* even featured a host's comment regarding dairy and the problem it represented, rebroadcasting it multiple times:

it's worth considering that this week especially as our dairy farmers strain under the woeful glo- global dairy prices and we're reminded again of the fickleness of our export economy

However, the problems of dairy were prominent in talk radio discourse and the word *dairy* was used 48 times in the wider context of talk radio, it was only used once on talkback calls. But, this is not to say that hosts and callers on talkback calls were not discussing the problems related to dairy. Closer analysis revealed it was discussed on 10 out of the 85 calls (11.8%).

Discussion of dairy and the economy emphasised human dimensions and the centrality of dairy sector to New Zealand's economy. By human dimensions I do not mean to say that callers were sympathetic to the plight of farmers, and in particular three callers were critical of special status for farmers when many people were struggling. It is interesting that hosts used the *economy* to remind callers that there were negative collective consequences accompanying the personal costs to farmers, as this example illustrates:

NewstalkZB Call n031001/1 March 10

Rick (Caller): ... New Zealand public has had to pay the high prices as well (.) and now they're lookin (.) some of these dairy farmers and that are goin (.) cryin to the government wanting a handout well what about the (.) poor income your low income earner whose struggling to (.) survive (.) weekly or daily (.) they never got the cuts on their dairy products for that

Tim Beveridge (Host): mm (.) no well ah (.) there'll be i there are a lot of people who will um (.) ya know will who'll who'll agree with ya but ah on a human level though (.) I mean it's (.) and it's not good for the economy for a (.) ya know for for this level of stress to be placed on that sector i don't think ...

In this instance the host replies to the caller's disregard for the plight of farmers by beginning to discuss the "human level", but then emphasised the collective concern *for the economy*. By reorienting from debating the relative struggles of dairy farmers and low income earners, when the caller had already been critical that dairy farmers typically earned substantial incomes, the host appealed to a more generalised concern that both caller and host might share.

Table 6.13 Concordance of hosts (calls excluded) mentioning *dairy* in the context of *economy* (all rows)

15/02/16	Host/Talk	Paul Henry	tinued for britain pioneering the frozen meat and <i>dairy</i> trade that would become the cornerstone of the
17/02/16	Host/Talk	Rachel Smalley	what impact is that <i>dairy</i> price having on the likes of our inflation the lik
17/02/16	Host/Talk	Mike Hosking	and the ongoing hole in the <i>economy</i> that um <i>dairy</i> 's hit us with
19/02/16	Host/Talk	Bruce Russell	land 's <i>economy</i> has ground to a halt with weak <i>dairy</i> prices and a construction slow down
19/02/16	Host/Talk	Bruce Russell	land 's <i>economy</i> has ground to a halt with weak <i>dairy</i> prices and a construction slowdown
19/02/16	Host/Talk	Bruce Russell	falling <i>dairy</i> incomes remain the main headwind for the econ
02/03/16	Host/Talk	Mike Hosking	in the <i>economy</i> so that to offset something like <i>dairy</i>
02/03/16	Host/Talk	Kerre McIvor	when fontera were giving <i>dairy</i> producers the huge payouts the best thing for th
08/03/16	Host/Talk	Bruce Russell	and when i first saw this i thought ah ah the <i>dairy</i> <i>economy</i> ai n't flash they 're not willing to get i
09/03/16	Host/Talk	Mike Hosking	in other areas to more than counter balance the <i>dairy</i> industry which is good to know
14/03/16	Host/Talk	Tony Amos	omy that 's driven in the main right now by our <i>dairy</i> <i>economy</i> and the failing <i>economy</i> around the d
14/03/16	Host/Talk	Tony Amos	y <i>economy</i> and the failing <i>economy</i> around the <i>dairy</i> industry
14/03/16	Host/Talk	Tony Amos	alk about talk about the <i>economy</i> talk about the <i>dairy</i> sector the changes that might be required there
14/03/16	Host/Talk	Tony Amos	when the <i>dairy</i> <i>economy</i> 's having a how hard time as it is now
14/03/16	Host/Talk	Paul Henry	so are we doing enough to help <i>dairy</i> farmers remember it is a vital part of our econo
16/03/16	Host/Talk	Tony Amos	well of course from the <i>dairy</i> industry it 's hurting it 's hurting farmers and th
19/03/16	Host/Talk	Jack Tame	orth considering that this week especially as our <i>dairy</i> farmers strain under the woeful glo - global dai
19/03/16	Host/Talk	Jack Tame	ury farmers strain under the woeful glo - global <i>dairy</i> prices and we 're reminded again of the ficklene
25/03/16	Host/Talk	Jack Tame	orth considering that this week especially as our <i>dairy</i> farmers strain under the woeful glo - global dai
25/03/16	Host/Talk	Jack Tame	ury farmers strain under the woeful glo - global <i>dairy</i> prices and we 're reminded again of the ficklene
27/03/16	Host/Talk	Jack Tame	orth considering that this week especially as our <i>dairy</i> farmers strain under the woeful glo - global dai
27/03/16	Host/Talk	Jack Tame	ury farmers strain under the woeful glo - global <i>dairy</i> prices and we 're reminded again of the ficklene
27/03/16	Host/Talk	Jack Tame	orth considering that this week especially as our <i>dairy</i> farmers strain under the woeful glo - global dai
27/03/16	Host/Talk	Jack Tame	ury farmers strain under the woeful glo - global <i>dairy</i> prices and we 're reminded again of the ficklene

Table 6.14 Concordance of newsreaders mentioning *dairy* in the context of *economy* (all rows)

16/02/16	Newsread		try 's <i>economy</i> continues to slow due to falling <i>dairy</i> prices
16/02/16	Newsread		the <i>economy</i> 's bracing for the next global <i>dairy</i> trade auction in the early hours of tomorrow me
16/02/16	Newsread		<i>economy</i> continues to slow mainly due to weak <i>dairy</i> prices
16/02/16	Newsread		falling <i>dairy</i> prices remain the headwind for the <i>economy</i> ac
16/02/16	Newsread		falling <i>dairy</i> prices remain the main headwind for our econo
24/02/16	Newsread		nathan guy says <i>dairy</i> farms play a vital role in sustaining new zealand
01/03/16	Newsread		the low <i>dairy</i> payout is not only hitting farmers hard its starti
01/03/16	Newsread		the low <i>dairy</i> payout is not only hitting farmers hard its starti
01/03/16	Newsread		the low <i>dairy</i> payout is not only hitting farmers hard it 's start
14/03/16	Newsread		senior economist christina leung says low <i>dairy</i> prices are n't upsetting the <i>economy</i> just yet

Table 6.15 Concordance of experts mentioning *dairy* in the context of *economy* (all rows)

01/03/16	Expert	Bernard Hickey	doing well tourism and construction but others <i>dairy</i> particular the likes of southland waikato taranaki
08/03/16	Expert	Bernard Hickey	ny in particularly those that are most reliant on <i>dairy</i>
09/03/16	Expert	Bernard Hickey	re got strong construction obviously very weak <i>dairy</i> and the retail sectors doing particularly well
13/03/16	Expert	Shamubeel Eaq	etty bad um in terms of the global <i>economy</i> the <i>dairy</i> sector in new zealand and also there is no inflat
13/03/16	Expert	Shamubeel Eaq	<i>economy</i> and one big manifestation of that is <i>dairy</i> prices which are extraordinarily low
13/03/16	Expert	Shamubeel Eaq	eral impact on the <i>economy</i> because lets face it <i>dairy</i> is a big deal for new zealand
13/03/16	Expert	Shamubeel Eaq	and we offset the risk that we see in sectors like <i>dairy</i>
14/03/16	Expert	Martin Ellison	(well into the future will be concerns around the <i>dairy</i> price and ah the new zealand <i>economy</i> and that
30/03/16	Expert	Bernard Hickey	a two-tiered <i>economy</i> going on at the moment <i>dairy</i> down in the dumps taranaki double down in the

Table 6.16 Concordance of MPs mentioning *backbone* in context of *economy* (10 random rows)

23/07/03	Labour	Clayton Cosgrove	rural sector , the value to our economy , and the <i>backbone</i> of our economy .
17/11/05	National	Nathan Guy	“ The <i>backbone</i> of the New Zealand economy will continue to b
24/09/09	National	Paul Hutchison	ens seems to appreciate is that agriculture is the <i>backbone</i> of New Zealand 's economy .
16/05/13	Labour	David Shearer	Those people are the <i>backbone</i> of this country and the engine of our economy .
14/06/05	National	Pansy Wong	Farming is the <i>backbone</i> of the New Zealand economy .
09/12/08	Progress	Jim Anderton	ional Government is opposed to the agricultural <i>backbone</i> of our economy .
03/07/08	Progress	Jim Anderton	performance among the industries that form the <i>backbone</i> of our economy .
28/04/09	Labour	Stuart Nash	But these companies are the <i>backbone</i> of the New Zealand economy , and if we are to
24/03/09	Labour	Raymond Huo	those small to medium sized enterprises are the <i>backbone</i> of our economy .
19/05/11	National	Shane Ardern	If the agriculture sector is not the <i>backbone</i> of this economy , what is ?

In the interaction above, the host referred to “that sector”, indicating the significance of the dairy sector. Multiple speakers referred to the centrality of the dairy sector to New Zealand’s economy. One host on two calls referred to *dairying* as *the backbone of the economy*:

we've relied on dairying as the **backbone of the economy** for long and all our eggs are basically been in the dairy basket haven't they

dairying the back- the **backbone of the economy** for so long dairying [emphasis added]

Although rare in the context of the talkback call data, when conducting quantitative and qualitative analysis of parliamentary debates in relating to *dairy prices* I had observed instances where MPs used the collocation of *backbone* and *economy*, especially in the form *backbone of the economy*. In the parliamentary corpus, *backbone* and *economy* was used within a sentence collocation span 134 times and the referents were typically agriculture or business (see Table 6.16).¹⁷⁴ The use of *backbone+economy* in these instances expressed common sense ideas about the nature of New Zealand’s economy and nation (Bell, 1996), the position of particular producers of wealth in relation

¹⁷⁴ It should be noted that another host outside of the context of calls, in an in-studio discussion, referred to businesses using *backbone+economy*: “it must be galling for hard-working small and medium business owners who are the backbone of this country's economy”. As was found in the previous study, the economy and nation were closely linked. In the context of parliament, it was also common to say *backbone of this country* or *backbone of new Zealand*, but the referent was still predominantly related to agriculture or, to a lesser extent, business (e.g. *Small business is the backbone of this country* or *The dairy sector is the backbone of New Zealand*). The use of *backbone* also parallels the rarer collocation of *lifeblood* with *economy*, which was only used by a caller once in the context of talkback calls (“when it comes to small business um which is the lifeblood of the economy um particularly the rural economy”) and 36 times by speakers in parliament, which was often used to refer to agriculture and business. While used to refer to agriculture and business, it was more flexible (e.g. it was used to highlight the importance of water, roading, and trade). And as with *backbone*, *lifeblood* was used outside the context of *economy* but again was used to indicate the importance of what was being talked about to the nation.

to the growth economy, and the consequent nature of problems related to agriculture and business as problems for the collective wealth and the political community.

6.4.3.4 Concluding insights from analysis of key issues

These policy-related issues demonstrated that speakers on talkback calls were often orienting to the problems of the polity when they were using *economy*. My analysis suggests that, while talkback calls certainly provide a forum for populist and conservative views, there were a wide variety of political views expressed. Talkback functions as a forum for members of the public to raise and deliberate topics that are not being attended to or addressed in parliament.

That specific examples of language use in talkback calls resonated in repeated use in political rhetoric is revealing. Speakers in distinct settings, parliament and talk radio, were not only using the same kind of phrasing, but in similar ways. These specific patterns of use have ideological significance beyond the specific settings. The use of *economy* in both the example of *low-wage economy* and *backbone of the economy* represented speakers foregrounding problems for groups of people as problems for the collective. These examples represent shared ways of thinking about the relatedness of people and groups in a particular national context and shared ways of thinking about the nature of New Zealand's economy.

What the analysis also showed was the importance of talk radio in reproducing and amplifying the kinds of political controversiality related to the economy observed in the parliamentary study. In some instances, specific arguments associated with the representatives of parliamentary parties led to discussions in talkback. This analysis, therefore, demonstrates direct connections between the speech of politicians and the speech of the public, with people directly responding to the arguments that politicians were making and participating in debates that politicians were taking part in. This analysis revealed the importance of political parties and hosts in setting and shaping the agenda for these kinds of debates.

6.4.4 Where is the growth?

Perhaps the fundamental characteristic of the two major parties' use of *economy* found in the study of parliamentary rhetoric was the very strong relationship between *economy* and words related to economic growth (i.e. *grow*, *growing* and *growth*). What was striking when it came to analysing the use of *economy* in talkback calls was that this feature was missing from the utterances captured during talkback calls. The words *grow*, *growing* and *growth* were not used at all in the context of *economy* by callers or hosts on talkback calls. Even widening this to any word forms of *grow* that were not strongly associated with *economy* in the parliamentary study, i.e. *grew* or *grown*, there were no instances of these words either.¹⁷⁵

That people on talkback calls, including hosts, differed so dramatically in their use of *economy* from the political leaders in the use of *economy* was surprising. This is a fascinating result, particularly at a time when the National government was celebrating economic growth and a strong economy despite the problems of dairy. What was also compelling about this result was that outside the context of talkback calls, growth talk was a more common feature of speakers' utterances on talk radio. In total there were 50 instances of growth words (*grow*, *growing*, *growth*, *grew*, *grown*) with *economy* in 45 separate utterances and this was spread across all speaker types.¹⁷⁶ The word *growth* was most frequent of these and used with *economy* 30 times. In total, across all non-talkback call utterances the growth words were used in 8% of utterances. These instances of use reflect examples of newsreaders reporting rates of growth as well as hosts editorialising, and hosts with experts, media representatives and politicians engaging in analysis and debate.

This absence in talkback calls, especially when compared with other talk radio discourse, was striking. That people on talkback calls were not unthinkingly reproducing the prevailing metaphorical language applied to the economy is revealing. Rather than being captured by growth, in the way it captures mainstream political debate and is banally reproduced through news reporting, commentary

¹⁷⁵ It might be supposed that this could be an artefact of the utterance transcription process and differences with these utterances in comparison to the sentence span used in the previous study. However, the growth words were often in characteristic idiomatic forms within a very close span (e.g. *growing economy*, *growing the economy*, *grow the economy*, *growth in the economy*) and none of these forms were present.

¹⁷⁶ As in the parliamentary study, what was growing was not always, but predominantly, the *economy*.

and analysis, people's use of *economy* indicated a qualitative difference in thinking. If the assumption of growth is so ingrained in people's thinking, there is the potential that it may not be directly discussed or may be discussed in another way. If this was the case, we would still expect evidence for this assumption. When initially viewing the keyword lists (Table 6.5), I wondered if *more* could indicate a more "lay" way of talking about growth.

Table 6.17 Concordance of talkback call speakers mentioning *more* in context of *economy* (all rows)

15/02/16	Caller	Anne	we ah we a lot of people are feeling um less um <i>more</i> -LSB- inaudible -RSB- and affected by it
22/03/16	Caller	George	a bit more time off by paying all of his workers <i>more</i> and by um yeah basically by giving them more
15/03/16	Caller	Paul ("Been In	sold its quota to the states and they coulda sold <i>more</i> and they've got the same prospects again this y
01/03/16	Caller	Mark	get fed back into the <i>economy</i> so you'll have a <i>more</i> buoyant <i>economy</i>
21/02/16	Host/Talk	Gary Denvir	at the numbers there's probably a heck of a lot <i>more</i> going the other w - over there than there was co
02/03/16	Host/Talk	Mark Dye	's more money floatin around for people to buy <i>more</i> goods you know which has flow on effects to b
15/02/16	Caller	Cath	conomic system would flow through and create <i>more</i> jobs and you know more people would spend a
02/03/16	Host/Talk	Mark Dye	that stimulates the <i>economy</i> that means there's <i>more</i> money floatin around for people to buy more ge
15/02/16	Caller	Cath	a of um giving people the money is to try to get <i>more</i> money into the economies to because the very v
01/03/16	Caller	Selwyn	and those employees were able to spend <i>more</i> money into the <i>economy</i> and therefore all the b
02/03/16	Host/Talk	Mark Dye	on effects to businesses they're able to employ <i>more</i> people etcetera etcetera
07/03/16	Caller	Sam	ytime Labour's in power they keep on bringing <i>more</i> people into the government departments and th
15/02/16	Caller	Cath	ow through and create more jobs and you know <i>more</i> people would spend and it would revitalise the
07/03/16	Caller	Sam	loyment goes down and then the <i>economy</i> goes <i>more</i> smoother
17/03/16	Caller	Graham[2]	tax in the <i>economy</i> will um please tax us some <i>more</i> so that we'll be good people
16/02/16	Host/Talk	Tony Amos	<i>my</i> and ya know what if we if everyone earned <i>more</i> the country benefits because people we do n't sa
22/03/16	Caller	George	stimulated the <i>economy</i> by giving everyone a bit <i>more</i> time off by paying all of his workers more and
22/03/16	Caller	George	more and by um yeah basically by giving them <i>more</i> time to spend their money
16/02/16	Host/Talk	Tony Amos	ple we do n't save the money when we get paid <i>more</i> we spend it do n't we

However, as the concordance in Table 6.17 indicates, rather than an orientation to a continual *more*, the use of *more* was primarily in the context of the arguments to pay people *more* (discussed in section 6.4.2) with the resulting flow on effect of mutual economic benefit.¹⁷⁷ Although this kind of stimulus argument was appealing to *more* for all, this does not capture the kind of growth talked about by economists, politicians and media. Rather than representing the economy as in a state of constant change and increase in output, the speakers were talking about one-off qualitative shifts from one kind of economy to another: from the kind of economy that failed to meet people's needs to one that did. This much more static step-wise conception was grounded in people's dissatisfaction with the

¹⁷⁷ Similar arguments were observed in relation to immigration, with the stimulus being immigration, and again people's criticism being it was not bringing about a qualitative improvement.

economy here and how, rather than a promise of continual change. The economy of more, at least in the context of these debates, was not an economy of continual more.

An orientation to the kind of economy is different to the kind of economic causal inferencing scholars have previously researched (see Chapter 3). However, as was discussed in Chapter 5, evaluations of the economy were highly significant for politicians in arguments about the government record. Growth was just one way politicians questioned and contested the good economy. As the discussion of wages and immigration indicated, on talkback there was a wide variety of ways of questioning the qualitative economy, including use of *low-wage economy* and, in the case of *immigration*, one speaker referred to a *false economy* based on *immigration*. There were a range of ways of engaging with the nature of the economy in addition to the problems I have identified, for example:

RadioLive Call r021715/1 February 17

Duncan Garner (host): Andrew giddy

Andrew: Yeah giddy Duncan how are you today

DG: not too bad mate how are you

A: pretty good stuck in traffic in Auckland but ya get that

DG: <laughs> no surprise <laughs>

A: just an just an extra expense for us Aucklanders <inaudible>

DG: yeah well i'll i'll tell you what mate eh i mean we are not having a good economy by sitting on motorways simple as that

In this instance, the host reframes the joking allusion to the traffic problems of New Zealand's largest city, as comment on the *good economy*. In one of the more creative uses of language, the speaker repeatedly used the word "taxonomy" and after the host stated that he wasn't familiar with the term "taxonomy", the caller replied:

well it's a taxing economy so you know the tax in the economy will um please tax us some more so that we'll be good people

This term the caller appeared to have coined was perhaps apt in classifying the kind of economy he was objecting to.

In shifting to look at criticism of the “good economy”, there were examples of speakers on talkback calls contesting the government’s claims about their growth economy, for example:

Newstalk ZB n031501/1 March 15

Bruce Russell (Host): his government's the one that encouraged people to do this when they came into office because there was gonna be such a bright future so (.) if you've got (.) if you've got one of the key products that this economy produces (.) one of the key activities dairying (.) in such awful trouble (.) is the economy rock star at the moment

Newstalk ZB n032505/1 March 25

Bruce Russell (Host): Well well is he doing a good job with the economy are he and English doing a good job (2)

Matthew (Caller): Aww I don't know ah (.) ask a dairy farmer (2)

BR: Well <laughs> (1) you'll probably know <laughs> know what answer ya gonna get there (1)

M: Yeah I think you would wouldn't ya

The speaker in the first example, like Labour MPs in parliament at this time, was questioning the claim that New Zealand’s economy was a *rock star* due to its high growth rates when compared with other nations (see Section 5.5.2.3).¹⁷⁸ This same pattern of questioning, and indeed the kind of criticism in relation to the problems of dairy was repeated in both calls. Even if talkback callers and hosts on calls were not talking about economic growth in relation to *economy*, speakers were still evaluating the economy, and in the case where they were critical, there is evidence that some speakers were arguing with the promises of the growth economy.

In concluding the analysis, I want to suggest that the absence of explicit growth-talk is not just a difference, but that it represents a disconnect between elite and “lay” ways of representing the economy. An assumption of the discourse of parliament was that economic growth is important and something that citizens should be orienting to. The programmed content of talk radio, that is the pre-arranged interviews, commentary by hosts, the news, reproduced this assumption. This absence could be read as an implicit critique or rejection of the growth arguments of political elites.

¹⁷⁸ Here, the host is also alluding to and questioning a National party electoral slogan from 2008, *A Brighter Future*. The *rock star* comment references a January 2014 pronouncement by an economist from HSBC granting New Zealand “rock star economy” status based on forecasts of GDP growth rates in comparison to other countries (Harjani, 2014).

Although this is speculation, there was one particular talkback interaction where the caller noticeably rejected a host's reproduction of the arguments of political elites. The caller began their call by asking the host "what do ya know about this brighter future?", referring to an electoral slogan used by the National party. The caller used the slogan again multiple times through the early part of the call referring to it as "the National logo" and joked: "need glasses so bright that everything's hunky dory". The host eventually defended "the government's record" with explicit appeal to *our economy* as follows:

Newstalk ZB n022703/1 February 27

Terry (Caller): ... I don't see any brighter future at all in the near future as well I work two jobs (.) and I know a lot of people do the same everybody's struggling (.) and we're helping out on the relatives that do (.) ya know need hel- need help ...

Tim Beveridge (Host): Well I guess I guess look I dunno I Terry look it is tough for many people but look at this way if you're holding two jobs imagine if those jobs weren't there (.) um it it be even worse so maybe (.) ya know ah look I dunno I dunno ah ah it's it's not for me really to defend the government's record or or visa versa but (.) you know and i think that they have done some good things they've got us through you know we've we've been (.) praised for the way our economy 's been managed ah you know

The caller's description of his personal experience of struggle in National's promised *brighter future* was met with the cynical counter-factual that things could be *even worse*. The host, repeating a tactic he had used on other calls in disagreeing with callers, disclaimed his partisanship while claiming the independence of unnamed others who had *praised* the government's *economy*. The caller responded with an exasperated laugh. This interaction illuminates how the appeal to *economy* represents a closure of arguments based on the lived experience of people. The caller was not showing ignorance and was talking from experience in criticising government. The host in advancing his *economy* argument was not addressing the substantive criticism of the caller and was appealing to the same kind of narrow political arguments the caller had rejected at the outset of the call. Economists, perhaps take comfort in this: it wasn't your economy that was being laughed at.

6.5 Summary

This chapter aimed to identify common features of rhetoric related to the economy on talkback calls. I discussed the results in relation to four key findings. Firstly, speakers were orienting to and appealing to the nation and government when they were using *economy* and they often implicated themselves in these arguments.

Secondly, people engaged in causal reasoning, but there was a specific common kind of causal reasoning being used. Speakers were most often suggesting that paying people more or meeting their needs would produce more consumptive economic activity, with collective wealth an emergent quality of this spending. This was not causal explanation for the sake of it, it was an argument for action to address people's material needs based on an appeal to the prosperity of the collective, the economy. An additional aspect observed in relation to this causal talk was instances where hosts positioned themselves as authoritative with respect to *economy*-talk and used their power in the situation to reinforce this position.

Thirdly, people were familiar with, orienting to, and able to think about contemporary problems and debates related to the economy. There was evidence that people were orienting to the problem of the economy in the present and drew on socially-shared and political ways of representing the economy. Speakers used the economy in appeals to the common good and appeals to the interrelatedness of the collective in relation to specific problems. This analysis also demonstrated direct connections between party politics and the speech of politicians and *economy*-talk on talkback calls. This suggests that political debates were a driver of this talk but also indicated specific features of discourse that MPs and people on talkback calls used.

Finally, when explicitly compared with data from the corpus of parliamentary speech developed in Chapter 5, it was surprising that no speakers mentioned *growth* or word forms of *grow* in the context of *economy*, especially since this was a feature of instances of use of *economy* captured from the wider context of talk radio news, commentary and dialogue. What was one of the most noticeable features of rhetoric related to the economy in parliament was absent from talkback calls.

This represents evidence for a disconnect and perhaps, for some speakers, even a rejection of the repeated and constant promises associated with growth. What people were orienting to were one-off qualitative shifts in the kind of economy: from one that was problematic to one that was not.

An additional contribution of this chapter to the wider thesis was documenting new processes for building and analysing an untranscribed audio corpus for discourse-oriented research. During the research reported in this chapter I developed a process for retrieving many examples of use of a keyword and conducting analysis of patterns of use. This chapter documented this work and I will evaluate and discuss this as a contribution of the overall thesis in Section 7.3.2.

Chapter 7 Conclusion: What an “in the wild” perspective tells us about lay people’s theories of the economy

7.1 Introduction

In this concluding chapter I bring together the findings of the two studies and discuss how the results of these studies contribute to this rethink lay people’s theories of the economy. The first study, reported in Chapter 5, analysed the use of *economy* in New Zealand’s parliament. The second study, reported in Chapter 6, analysed the use of *economy* in talkback calls. I discuss key characteristics of the use of the economy “in the wild” that these studies revealed and relate this to qualities of lay people’s thinking that previous research has not sufficiently addressed (see Chapter 2 and Chapter 3).

This concluding chapter then turns to discuss the key methodological contributions of the thesis. These include contributions related to the two studies. I will review the contributions of the NZPLC and key collocates analysis, developed in the course of the study reported in Chapter 5, as tools that other scholars can use and, in particular, their relevance for studying parliament and the people, parties, ideas and arguments that inhabit it. I will then evaluate the methodological contribution of Chapter 6 with respect to the use of an untranscribed audio corpus and the novel method developed to identify keywords and analyse their use.

In the final sections of this thesis I identify opportunities for future research and reflect on how rethinking lay people’s theories of the economy can enrich wider debates about lay people, economic experts and economics itself.

7.2 Rethinking lay people's theories of the economy

The aim of this research was to *contribute to our understanding of lay people's theories of the economy by interrogating, challenging and addressing key assumptions underpinning previous research*. At the outset this research was imagined as an interdisciplinary and cross-disciplinary kind of enquiry. This was a cross-disciplinary engagement with research typically associated with economists and economic psychologists and I situated my perspective within the intersection of critical political psychology and corpus linguistics. This section will provide a brief overview and then address the cross-disciplinary contributions that this research makes to the existing body of research on lay people's economic thinking.

To provide a framework and structure the arguments in the thesis I have proposed a distinction between two assumptions from previous research on lay people's theories of the economy and the alternative approach I develop. I borrowed the phrasing "in the wild" from Adrian Finlayson (2007, p. 552) who suggests that political theorists and analysts should pay more attention to public political arguments "in the wild". In the thesis I developed Finlayson's idea further for an enquiry grounded in critical political psychology and applying corpus methods. I contrast the "in the wild" approach that I was developing with two key assumptions: conceiving of and studying lay people's thinking in a disciplinary way, which I refer to as *from the Academy*, and conceiving of and studying lay people's theories according to cognitivist assumptions, *in the head*.

The *from the Academy* assumption was examined in detail in Chapter 2 in reviewing research that makes economists' thinking the reference point for lay people's thinking. I argued that there is a tendency for economists and psychologists to privilege a disciplinary frame when considering lay people's thinking and that this disciplinary frame is reproduced in the way scholars test lay people on some essential account of disciplinary knowledge. I suggested that this tells us a lot about how economists and psychologists think about economic expertise and their assumptions about the implicit separateness of the economic and political spheres, but very little about lay people's thinking. The *in the head* assumption, examined in Chapter 3, is the tendency to assume the actuality of lay people's

“economics” as an individual-level cognitive structure that researchers can interrogate when they survey and interview people about economic phenomena. The problem with this assumption is that it tends to abstract economic thinking from its socio-political context.

To critically interrogate these *from the Academy* and *in the head* assumptions and respecify the study of lay people’s theories of the economy as an “in the wild” enquiry, I drew on the scholarship of Michael Billig and others on rhetorical psychology (Billig, 1987, 1991; Condor et al., 2013; Gibson, 2015). This perspective conceives of people’s thinking as a social form of action that is observable in spontaneous argumentative discourse and that is interpretable through studying the relevant argumentative context. Drawing on these ideas I reconceived lay people’s theories of the economy as action oriented to a context of ongoing public political debate and suggested that studying the rhetorical strategies and common-places of debate “in the wild” provide an empirical grounding for examining how people think about the economy.

As raised in the introduction to the thesis (see Section 1.4) the rhetorical psychology approach disputes a hard distinction between thinking and speaking. An enquiry drawing on this perspective studies spontaneous utterances as examples of public thinking and also attends to the context of public argument to understand what people are orienting to when they think. In the following discussion, my use of *thinking* should be understood to encapsulate this expanded conception encompassing private and public kinds of deliberation. As mentioned in the introduction, this is not to say that all speech is thinking and all thinking is speech. In the case of thinking about the economy, while researchers like Furnham (1988) and, more recently, Leiser and Kril (2017) propose that public discourse is an important influence on the structure of cognitive representations related to the economy, this discursive dimension is treated as beyond the theoretical and methodological scope of enquiry. The rhetorical psychology perspective instead suggests that to study “language-based phenomena” requires the researcher to draw on “theoretical and methodological tools for examining how language is used in practice” (Billig, 2003, p. 228). Traditionally, this has meant applying conversation analysis and close contextual readings and therefore a key contribution of this thesis has been to develop the

argument for applying corpus methods as an appropriate tool for a rhetorical psychological investigation and to demonstrate this through the studies.

A key move of the argument in reorienting to an “in the wild” perspective was to make people’s use of the word *economy* the focus of the two studies. This shifted focus from disciplinary knowledge and attempts to draw boundaries around what is “economic” and what is not, to an object of enquiry that has been argued to differentiate expert and “folk” economic thinking (Schabas, 2009). Studying the use of *economy* also foregrounds the active quality of people’s thinking and what people were doing in settings of debate and discussion. By studying people’s use of *economy* this also shifted focus from claims about the cognitive reality of lay theories to public and political dimensions of thinking about the economy.

In the following sections I reflect on and connect the results of the two studies to the overall aim of the thesis. The intention of the two studies was to use corpus methods to examine common features of the rhetoric of the economy, including regularities related to assumptions, patterns of arguments and points of controversy, in two specific settings. The first study (see Chapter 5), which compared the use of *economy* by speakers from different political parties in New Zealand’s parliament, developed an understanding of the argumentative context related to the economy in relation to contemporary party politics. I also suggested that parliamentary rhetoric could serve as an *exemplar* of a political way of thinking about the economy that would inform the subsequent enquiry. The second study (see Chapter 6), analysed the use of *economy* on talkback calls on New Zealand talk radio stations. Drawing on the findings of these studies, in the following sections I clarify the cross-disciplinary contributions being made and discuss how this research contributes to rethinking lay people’s theories of the economy.

7.2.1 Politics matters

A key insight of this research is that politics matters: if we are to understand the way people think about the economy, we must appreciate that they are thinking in a *political* way. This finding is probably unsurprising to a political economist, economic sociologist, historian of economic thought or

heterodox economist, but the theoretical discussion of this through the first parts of the thesis and the empirical demonstration of this through the empirical studies is a contribution to the body of research on lay people's economic thinking. The assumption that economics and politics can be separated when conceiving of and conducting research and lay people's "theories" can be abstracted from their political context appears highly problematic. This research demonstrates that just as in parliamentary debates, people on talkback were orienting to politics when talking *economy*, and often the narrow politics of political parties and government. It demonstrated connections between political debates and the rhetoric of politicians and what was debated and said on talkback calls. Furthermore, the argumentative context interrogated in the parliamentary study allowed a number of insights about dominant assumptions related to the economy in political discourse that were meaningful for interpreting the findings of the talkback study.

Although it is perhaps obvious that the economy is the nation's economy, and certainly something other researchers who focus on rhetoric have indicated (Billig, 1995; Kurz et al., 2010), as well as van Bavel (2000) in his work on social representations of the economy, a key finding of the studies and this thesis is the *degree to which economy-talk is explicitly nation-talk*. This is a dominant assumption about the economy, but it has important implications. When people in parliament and talkback calls used *economy* they were often appealing to the collective advantage and welfare of their political community. There was evidence from the talkback study that the *embedding* move I suggested in Chapter 5 (see Section 5.6.3) was counterpoint to a *disembedding* move that critics problematise. People do not just appeal to a separate independent economy that I referred to as *disembedding*, they also use *economy* to ground their argumentative appeals in the interrelatedness of people within their political community, which I refer to as *embedding*. While the *disembedding* move could represent the closure of people's lived experience, their wellbeing and social and environmental concerns, the *embedding* move represents and emphasises the interrelatedness of people's lived experience. While *the growing economy* is presented as an end of government policy, for instance, this is continually brought back to the implicatedness of *our economy*. I suggest that these related moves give the economy its power in political rhetoric and *our* politics.

The finding that the economy is closely linked to appeals to the advantage of the political community challenges the assumption that we can straightforwardly separate the sphere of the economy from the sphere of politics. I would challenge a critic to pull apart the kind of “in the wild” discussion and define the boundaries between what is economics-talk and what is politics-talk. Even in the cases in Chapter 6 where economistic causal talk was observed on talkback interactions, this represented an appeal to a different kind of economy grounded in the collective prosperity and welfare. I suggest that it is no easier to separate these spheres out when making claims about people’s cognitions.

That *economy* “in the wild” is infused with politics focuses attention back on the rhetoric of researchers, and especially economists, who have worked on lay people’s economic thinking. This is an opportunity to briefly reconsider the rhetoric of past research that has used *economy* to prompt free discourse and elicit survey responses when researching lay economic thinking (for example, see: Williamson & Wearing, 1996; Blendon et al., 1997; van Bavel, 2000; Caplan, 2001; Bastounis et al., 2004; Leiser & Aroch, 2009; Sapienza & Zingales, 2013a). In the case of Sapienza and Zingales (2013a, p. 637), the items given to lay people were “slightly modified” from an expert version “to eliminate jargon or make them more comprehensible to an average citizen”. The “average citizen” version of one item read:

The US economy can be made sustainable without cutting Medicare and Medicaid benefits and without increasing taxes on households with incomes below \$250,000

(Sapienza & Zingales, 2013b, p. 2)

while the “expert” version read:

Long run fiscal sustainability in the U.S. will not require cuts in currently promised Medicare and Medicaid benefits and/or tax increases that include higher taxes on households with incomes below \$250,000

(Sapienza & Zingales, 2013b, p. 2)

The substitution for this item (“US economy can be made sustainable” versus “Long run fiscal sustainability in the U.S.”) reproduces an “in the wild” pattern of use observed in both studies, in which *economy* was sometimes used to represent the government’s fiscal situation. Another example

demonstrates the close association between *economy* and nation. In the survey reported in Blendon et al. (1997, p. 111), people were asked to determine whether “new technology, foreign competition, downsizing”, will be “[good/bad] for the country”, but in other items used the phrasing “[good/bad] for the economy”. While *economy* and *country* could be understood to reference distinct concepts, here they are being used as if synonymous.

These two examples are interesting, not because they indicate problematic method or terminology, but because they demonstrate the difficulty that economists and economic psychologists have in separating *economy* in their research from “in the wild” patterns of use associated with politics. The economists and economic psychologists who have approached lay people’s thinking in a way that privileges economic knowledge have treated their enquiries as if they are examining the public’s version economists’ knowledge, a technical and scientific account of economic reality. However, in their research they are using the word *economy* and associated rhetorical formulations involving *economy* that are closely associated with public political debate. I suggest their research should be understood, therefore, as what it is in practice: an engagement with this public, political kind of thinking.

7.2.2 How politics matters

The rhetoric of political parties related to the economy continually reinforces the agency of government and consequent responsibility and role of government in relation to the economy and positions the economy as an object of government action, the action of past, present and future governments. That *economy* and *government* were so strongly collocated in parliament cannot be reduced to an artefact of linguistic action in parliament. Speakers on talkback calls also oriented to government in very similar ways.

That the economy is narrowly the nation’s economy and there is a state with power to act for the good of the nation’s economy sets up the expectation that the government has a responsibility and indeed should act to ensure the advantage for the nation’s economy. This sets a foundation for thinking about and judging government action, which is that governments should act when they can to

ensure advantage and prevent or rectify disadvantage and not act to harm or prevent advantage. This drives debate concerning what can and should be done, as well as criticisms and justifications of governments and their actions with respect to the economy.

A key implication of this for rethinking lay people's thinking about the economy is that people are orienting to those who have the power to act on the economy. People speaking on talkback calls were not seeking to understand or manipulate the economy or economic forces by themselves, people were representing themselves as implicated in the actions of the state on behalf of the collective and were orienting to debates about when and how the government should act. And so, integral to the context of lay people's thinking on the economy are ongoing debates about government actions and responsibility with respect to the economy. Appeals to the responsibility of government with respect to the economy, to bring about collective advantage and to mitigate harm, appear a key feature of lay people's thinking.

An important finding of the parliamentary study was the extent to which rhetoric related to the economy is oriented to the praise and blame of governments, and so, connecting this finding to the legacy of instruction on rhetoric, it belongs to the epideictic genre of rhetoric (J. Martin, 2013, pp. 52-53). Treating the economy as if it demonstrates a successful government could be understood as an example of the "it's the economy, stupid" trope that commentators and political scientists suggest is the way voters evaluate political leaders (Lewis-Beck & Stegmaier, 2013, 2007; Duch, 2007; Lewis-Beck & Paldam, 2000; Nadeau et al., 2012). It is not self-evidently "it's the economy, stupid" when politicians are speaking, it is "look, see, everyone: it's the economy, stupid", which is an appeal in an ongoing argument about whether and how the economy demonstrates the right to govern. A recurring disagreement is whether the good or bad economy is the result of government action and whether government can take credit for the economy.

The rhetorical mobilisation of the economy in the praise and blame games of political parties are revealing in rethinking lay people's theories of the economy. This contextualises lay people's thinking related to the economy in that claims about the goodness (or badness) of the economy are

often treated as evidence in public debates about who should govern. These blame and credit games, the banal party politics of the economy is the background noise to public thinking about the economy. Representatives of political parties are obviously very interested in the outcomes of these debates, but it appears that members of the public were also engaging with these kinds of debates and made claims about the economy to challenge the government.

Another finding from the parliamentary study, with wider relevance for lay people's thinking was that specific actions justified *for the economy* were conceived as part of a suite of coordinated action by government for their specific goals. This is quite different to the kind of bivariate causal inferencing that are sometimes presented to participants in the academic research on lay people's economic thinking. For example, Leiser and Aroch (2009, p. 5) asked people questions of the form: "If *variable A* increases, how will this affect *variable B*?", and they offered the example: "If the *unemployment rate* increases, how will this affect the *inflation rate*?". This bivariate causal calculus, although possibly consistent with an undergraduate economics textbook, appears to neglect a significant kind of "economic causal discourse to which [people] are constantly exposed" (p. 12). Specifically, as the parliamentary study demonstrates, citizens are likely to be confronted with arguments from political leaders about the programmatic nature or the conventionality of a whole set of connected government action and arguments about the kind of advantage it will bring about.

The talkback study put this in a new perspective. Although there were examples where people were critical of government's failings with respect to their own promises for a better economy, what was more common was a focus on the problematic kind of economy now and the need for a better kind of economy tomorrow. This rhetorical form similarly underpinned government arguments for economic reform.

7.2.3 Claims about language and the key assumption of growth

As argued in Chapter 3 (see Section 3.3.2), some psychologists have indicated that public discourse is an important influence on lay people's economic thinking (Vergès, 1987; Furnham, 1988; van Bavel, 2000; Leiser & Kril, 2017), but previous researchers have not sufficiently addressed this discursive

dimension when going about their research. There has not been research that makes public rhetoric the focus of enquiry or made the kinds of connections that I have in this thesis. There is a tendency in the literature to either cherry-pick examples (for example, see: Leiser & Aroch, 2009, p. 12) or point to the importance of metaphor as the basis for thinking about an unfamiliar domain (Leiser & Kril, 2017). A close and systematic look at political rhetoric related to the economy offers a look beyond a few examples of metaphors and other noticeable language features. By explicitly studying a prominent setting for political rhetoric related to the economy, I was able to address features of economic discourse that might be significant for understanding lay people's thinking.

The breadth of data gathered for the parliamentary corpus and talk radio was useful as it gathered many instances of use, including examples of less frequent, but still meaningful, patterns in language. This indicated the relevance of a reflexive approach to interpretation, involving analytical moves from specific examples in one corpus to the other. The intertextual orientation allowed me to understand both the presence of very common patterns of use, but also rare but significant forms and absences.

Examining language in this way was an attempt to understand both strategic use of language but also common assumptions. The rhetorical psychology perspective attends to the importance of shared, common-sense ideas as a feature of thought that researchers should attend to (Billig, 1987, 1991; Billig & Sabucedo, 1994; Billig, 1992/1998). What emerged from analysis were assumptions about the nation and government already alluded to, but also the key growth assumption of the two major parties.

The discussion in Chapter 5 (see Section 5.6.2), in attending to the way the economy is evaluated and contested, provided a nuanced account of the growth economy. In specifying growth as the dominant norm of the rhetorical economy this indicates there are normative ways to evaluate the economy. In reflecting further on the discussion in Chapter 5 it appears that there is also a negative logic of growth: as much as growth is an articulation of common advantage and collective wealth, it is also grounded in problematisation of a non-growing economy and the harm this brings. This was

clearly the situation in 2008 in the context of a financial crisis and looming global recession. Parliamentarians focused on appeals to growth as the answer to the expected loss of jobs in justifying appropriate courses of action.

To understand the kinds of arguments deployed to evaluate the economy it is necessary to understand how the economy is rhetorically manipulated as both a quantitative and qualitative entity. As discussed in Section 5.6.2, although a narrow quantitative realisation of the economy as GDP was clearly important, there were a related set of rhetorical moves to challenge this quantitative economy (or to defend it in the case of no/low growth). These were related in that they all interrogated and appealed to evaluations of the qualitative economy. Firstly, speakers could attack the growing economy with appeals to negative attributes expressed by other quantitative assessments of the economy, including jobs, interest rates, inflation, the fiscal deficit, the current account deficit. Secondly, although the ideal of growth was clearly important, there were challenges to the quality of growth by speakers (e.g. in criticising growth derived from non-productive speculation or government spending). Thirdly, speakers appealed to negative qualities not captured by typically accepted quantitative measures (e.g. the even-ness of growth, the wellbeing of people, the environment). Finally, there were appeals to problems.

The growth assumption prescribes government action in pursuit of growth and provides a way to evaluate governments. Political debates elaborate the quantitative and qualitative dimensions of the growth economy I have described. I suggest that the norm of growth and contestation within a framework oriented to growth is the broad context for lay people's thinking about the economy. Growth is a repeated and dominant way the economy is represented to lay people.

Recognising the dominance of the growth assumption is compelling given the literature neglects that this is perhaps the most pervasive feature of discourse related to the economy. For example, the most recent discussion by Leiser and Kril (2017) mentions economic growth straightforwardly as an economic concept, but although they mention "biological" metaphors (p. 147), they do not explicitly mention growth as a key concept related to lay people's economic thinking. In

contrast to this, it is striking that Katona (1975, Chapter 25), in concluding his tome on *Psychological Economics*, dedicated a whole chapter to critically consider the implications of thinking about growth and progress that had recently been challenged by *The Limits to Growth* (Meadows, Meadows, Randers, & Behrens, 1972). Perhaps subsequent scholarship by economic psychologists considers that everything has been said by Katona or take the compelling critiques of growth (Daly, 1974; Waring, 1999; T. Jackson, 2009; Daly, 2014; Kallis et al., 2018) as a given, but perhaps the lack of attention reflects the pervasiveness of the idea of growth in public thinking and that this key feature of the psychology of the economy captures our collective understanding and imagination about progress. If so, economic psychologists could simply be reproducing this assumption.

That growth is such a pervasive feature of the discourse of political elites, given claims in the literature about metaphor and its importance for “lay understanding” (Leiser & Kril, 2017), we might expect it to be a dominant way that lay people themselves represent the economy. However, a significant, and perhaps surprising finding, was the disconnect between the rhetoric of MPs and lay people in relation to the economy. The study reported in Chapter 6 indicated that even though growth is a very common metaphor associated with the economy, people were not captured by this elite language. They were not unthinking reproducers of dominant language. There was however evidence that people in the talkback study were contesting the goodness of the growth economy by representing the economy in the qualitative and problematic terms I have set out. This is a compelling disconnect that deserves future attention.

7.2.4 The problematic economy

This research indicates that there is a sense in which the economy is always problematic. In an ideological context where the economy is demonstrative of good governments and where there is an assumed norm of growth, problems are not just innocuous topics for debate, they are vehicles for arguments. In situations where politicians and people are calling for change, they often do so by appealing to problems. Although Williamson and Wearing (1996, p. 36) provided a compelling glimpse of lay people’s theories as “models of dissatisfaction and concern”, the academic literature on

lay people's theories of the economy has not fully appreciated the constant identification and mobilisation of economic problems in the public sphere and the constant appeal to a problematic economy to justify action or to critique governments. Speakers in both parliament and on talkback calls used problems to challenge claims about the good economy to criticise the government or to call for action.

The work of psychologists and economists working on lay people's theories of the economy has not sufficiently addressed the rhetorical dimension of problems as a fundamental characteristic of lay people's thinking. Scholars working in this area have tended to emphasise that the economic domain is a complex challenge for humans' deficient capacity to understand (for example, see: Leiser & Kril, 2017, p. 140). This implies that problems present themselves self-evidently as something important for people to attend to. But, problems are fundamental matters for debate (about the nature of problems, who is responsible and what to do about them), the outcome of which has real consequences. Significant public debates about problems are likely to capture public attention, but as much as this may drive significant public thinking, the capturing of attention is only the precondition for thinking. When people are thinking about the problems related to the economy, this is not a private problem-solving exercise, they are joining in with these public debates.

7.2.5 Dialogicality matters

The economy is clearly an object of political attention, imagination and action, but this is not a unified image and agenda. Previous research, in focusing on curating a lay economics, ignores or obscures the profound and appropriate disagreements related to economic thinking (Caplan, 2006; Rubin, 2003; Furnham, 1988; Leiser & Kril, 2017; Leiser & Aroch, 2009; Williamson & Wearing, 1996). The findings of both the parliamentary and talkback studies indicate the dialogical quality of the economy. In parliament the economies of political parties, including the kind of actions they advocate for the economy, are established and justified in counter-relation to other parties' economies. The analysis of the 49th, 50th and 51st parliaments demonstrated the considerable disagreement about the economy across multiple dimensions, including what is the state of the economy? what should an economy be

like? what action is appropriate? what happened? what should or will happen? That the rhetoric of political parties related to the economy draws on, reacts to and critiques the arguments of the other parties, and that it represents the constant counter-factual of alternative courses of action, imbues the economy with this dialogical quality.

The economies and counter-economies of political parties are discernible because of the explicitly dialogical quality of parliamentary rhetoric. However, this dialogical quality of the economy was, I argue, highly relevant for understanding lay people's thinking about the economy more generally. The challenge in applying the same kind of interpretive rationale to lay people's utterances is the problem of recovering what people are countering when they use the economy in debate.

The results discussed in Chapter 6 indicate that some speakers were engaging with the "economies" of political parties, however there was a more profound dialogue that appeared significant for people's thinking about the economy. In the same way that political parties problematised other parties' economies in arguing for a programme of action for a better economy, people were problematising the economy here and now (e.g. *low-wage economy*) in arguing for something better. Speakers were often orienting to the kind of economy, a qualitative and problematic entity that people are implicated in, and qualitative shifts for a better economy. Here, potentially, the other side of the argument that people were orienting to was the repeated promises of politicians for a better economy. It was interesting that people speaking on talkback calls did not qualify the economy in the positive ways that politicians do (e.g. *competitive economy*, *smart green economy*). The absence of these qualifications and the absence of growth-talk indicates a disconnect between the promises of political elites of the possibility of an imminent better economy and fundamental grievances underpinning the problematic economy of lay people.

One way to look at these results, including the contestation of economic results, explanations, proposals for action, and the nature of the good economy itself, is to emphasise that the rhetoric of political leaders and lay people is wrong, inconsistent and cynical. Perhaps this exemplifies the

problems of a “post-truth” era. However, debates related to the economy reveal the limitations of economic “truth” in the context of debates about what is a good economy, what should we do, and who should govern. These arguments are possible because the domain in question is characterised by complex causality, uncertainty and contingency, with the constant counter-factual of alternative courses of action sustained by political discourse. These arguments are appropriate because citizens and political leaders alike, even within the constraints of dominant economic ideas, disagree about what is a good economy, what should we do, and who should govern.

7.2.6 Concluding the discussion: Leo’s market

In concluding this discussion, I will revisit the kinds of problematic and limited thinking that economists and economic psychologists are studying and contrast this with the thinkers reflected in this research. In doing so, I will relay an interaction with Leo, my 3-year old son, in the car one day. On hearing a radio news report about a tertiary institution in New Zealand, I joked “the market must be broken”. Leo replied, “why is the market broken daddy, does it need a battery”. From the disciplinary perspective of an economist, their response might be: “How terrible that this boy does not understand the market and appreciate the marvels of the invisible hand – thank Friedman he cannot vote yet”.¹⁷⁹ From the perspective of the psychologist, their response might be: “Look see, this demonstrates the limitations of human cognition, he is attempting to understand the market in terms of a conceptual metaphor”.

My argument in this thesis is that, although Leo was undeniably trying to understand what I had said, he was also beginning a journey of being socialised into a debate about the appropriateness of applying market rationales, in this case: to “competitive” tertiary institutions in New Zealand. At some point when he is able to enter into a debate about the application of the market, the economist’s idealisation of their own knowledge about “the market” or psychologist’s ideas of cognitive limits become incidental to understanding his “lay thinking”. At the point Leo begins participating in this debate, drawing on arguments he has witnessed and been party to, drawing on common-sense ideas to construct his own arguments, at this point he is thinking.

¹⁷⁹ This comment is not too far from comments about the market in Caplan (2006), as well as his conclusions.

The aim of this thesis was to challenge the assumptions of previous research and to address these to rethink lay people's theories of the economy. If economists and economic psychologists listened to talkback calls, they would certainly find instances where their ideas about lay people's thinking were confirmed. There were examples of statements that were verifiably incorrect and that might indicate a conspiratorial or prejudiced kind of thinking. However, as the results of this research indicate, people's use of *economy* is richer than previous research has suggested. In this thesis I have drawn on the ideas of rhetorical psychology (Billig, 1987, 1991) to challenge the models of thinking that emphasises people as passive receivers of information, as limited, biased and deficient calculators. I have indicated that there is more to lay people's thinking about the economy than these limited models. When enquiry is open to the context of people's thinking, we find people engaging with and arguing about the economy.

In part this addresses ambiguities related to the findings of research, for example: the results Williamson and Wearing (1996) obtained when trying to map cognitive representations of the economy, or common claims in the literature about economic discourse that are not addressed adequately (Furnham, 1988; Leiser & Kril, 2017). This indicates the problems with treating lay "theories" as something like expert "theories" when experts are denying the politics of their own disciplinary knowledge. This also puts the modern use of *economy* itself in perspective, indicating that it is not monolithic in its abstractness, but that people are representing their implicatedness in the economy while they problematise and contest it.

7.3 Reflecting on the contributions of the methodological approach

In addition to the contribution of this thesis to rethinking lay people's theories of the economy, the way I approached this research was novel. As was discussed in Chapter 4 (see Section 4.4), there were tensions between the rhetorical psychological perspective I had engaged with in reconceiving lay theories and what on the surface could be dismissed as a quantitative method to count words and decontextualise their use. A key contribution of the thesis was to develop the argument for the relevance of corpus methods for a study applying rhetorical psychology and to demonstrate this in a

practical way. What the analysis revealed (see Chapter 5 and Chapter 6) was how quantitative and qualitative ways to interact with texts can contribute to the interpretive process. The analysis revealed both assumptions encoded in language and strategic use of language that allow new insights into lay people's thinking about the economy.

For corpus linguists, and social scientists interested in applying corpus methods, the thesis exemplified the application of corpus methods for the “in the wild” kind of enquiry I developed in the first half of the thesis. As such, it contributes to scholarship on the application of corpus methods beyond linguistics in the wider social sciences (McEnery & Wilson, 2001; Partington, 2013; Partington et al., 2013). In more general terms, it adds to the literature that critically reflects on the application of digital methods in the social sciences and how these methods can shed new light on social phenomena (Rogers, 2013; Marres, 2017).

It should be emphasised that as well as applying corpus methods, this thesis engaged deeply with theoretical, methodological and technical aspects of corpus methods and was innovative in these respects. I will now consider specific novel contributions that came out of the two studies. Firstly, relating to the study reported in Chapter 5, I will discuss the contribution of an annotated corpus of parliamentary debates. I will also discuss the contribution of an analytic technique I developed to detect meaningful shifts in the use of a word, which I referred to as *key collocates analysis*. Secondly, Chapter 6 began exploring and demonstrating the possibilities of using audio corpora for discourse analytic research, which is not currently done and has great potential. I will evaluate the use of an audio corpus and the techniques for engaging with the content of an audio corpus in more detail in this section.

7.3.1 The wider relevance of the corpus of parliamentary debates

A key contribution of the thesis is the annotated corpus of parliamentary speeches, the New Zealand Parliamentary Language Corpus (NZPLC). In this section I will highlight some of the potential that a corpus of this kind offers the public and scholars. As highlighted in Chapter 5, there has only been limited research on what is said in parliament. Previous researchers linked this, in part, to the

difficulty engaging with the texts themselves and welcomed the promise of future software-based tools for interrogating of the parliamentary record (Horn et al., 1983). Despite *Hansard* having been available in digital form for over 30 years there have been only limited attempts to engage with these records using the potential of computer-based analysis. In contrast to the online version of *Hansard* that was available at the time when this work began, the NZPLC allowed powerful search and analysis based on the various annotations and classifications, including those based on political party, government in power, and parliamentary terms. Even with recent updates to the official online version of *Hansard* which allow more powerful searching, an annotated corpus allows much more powerful kinds of textual analysis including corpus methods of the kind exemplified in this research and new forms of automatic textual analysis (e.g. to automatically classify speeches using topic modelling) (Grimmer & Stewart, 2013).¹⁸⁰ For the New Zealand community of researchers on politics, this research indicates the fruitfulness of both engaging with corpora like the NZPLC and building new corpora (e.g. based on media texts or archival material) to study New Zealand politics, parties and history.¹⁸¹

¹⁸⁰ To illustrate the relevance of supervised and unsupervised methods of text classification, while working on this thesis I presented on topic modelling of parliament in relation to how the Green party was using parliament. It indicated, for example, that during the 48th parliamentary term there was a noticeable increase in speech from the Greens in relation to climate change that preceded that topic being prominently discussed by members of the two major parties. There is potential for using topic modelling and other text classification methods to gain an understanding of what parliamentarians were collectively talking about at specific points in time or what specific parties were talking about. Although an understanding of this could be garnered by reading what bills were being debated, this does not get at issues raised in parliamentary question time or general debates. This becomes even more relevant now that scans of older *Hansards* are in the public domain. In the last year that the *HathiTrust* has made their archive of scans of the New Zealand historic *Hansards* available in the public domain. This unlocks what has been previously only available in physical volumes for researchers. It is perhaps easy enough for contemporary scholars to know what was being debated in parliament in 2016, but it is less straightforward to know what was going on in 1916 and these methods appear useful as a descriptive tool in this respect. I also suggest that these methods hold potential for examining party ideology as an alternative to use of party election manifestos. Parliamentary records are relatively continuous and comparable both diachronically and synchronically and allow researchers the opportunity to engage with actual use of parliament by elected representatives. In addition, my own further efforts to extend the parliamentary corpus back in time, which required using data sources (both digital and digitised texts) that were incompatible with the modern publicly-available *Hansard* and the software I developed for processing it, indicate the relevance of training supervised classifiers to detect and code procedural speech or speaker changes. These are problems I will engage with more after my thesis research.

¹⁸¹ Because transcripts of the proceedings of deliberative bodies of other political communities are increasingly being digitised (and some have already been compiled into corpora), it will be possible to use this data-set in the future to conduct comparative work to understand unique characteristics and practices of New Zealand's parliament, as well as differences in the kinds of debates and arguments between national parliaments.

The NZPLC has already been made available for other researchers in political science and linguistics at the University of Canterbury. My intention after my PhD is to develop the corpus and the associated web-based software tool that I wrote to browse and search the speeches and conduct the analysis as an online resource for the public and researchers to engage in new ways with what MPs are saying in parliament. Even in the context of international trends for national parliaments to make their deliberations available online and efforts to make digital archives publicly available, there is still work required to make these usable for researchers and the public. My intention to make a researcher-friendly and public-friendly corpus interface mirrors the kind of work that has been done internationally. For example, the AHRC-funded *Hansard at Huddersfield* project is currently working on a web interface for the parliamentary corpus the *SAMUELS* project built, which is based on over 200 years of speeches from the British parliament, to make this accessible for researchers and the public.

The study of parliamentary debates indicated the relevance of what I have referred to as *key collocates analysis* to detect shifts in collocation patterns over time as a way to identify changing patterns of argumentation in parliament related to a specific word. This analytic technique can be used in other kinds of corpora that allows comparisons over time and between different groups of people. Given the limitations of human memory and intuitions about language highlighted in Chapter 4 (see Section 4.3.2), changes of this kind are not conducive to straightforward qualitative analysis and not easily detectable using quantitative techniques in the corpus methods toolset. Even if the researcher has a good understanding of recent debates, there is the potential to engage with the texts using this technique to both confirm expectations and explore patterns of use that are less conducive to other qualitative and quantitative readings.

In addition to the kinds of analysis I conducted using the NZPLC in Chapter 5, there are also the possibilities for politics scholars to engage with the corpus beyond the texts themselves. The corpus records include a range of annotations or codings not related to the content of speeches. It records, for instance, who was speaking and when, the kind of debate that a speech was being made in relation to, who was being questioned during parliamentary question time, and when votes occurred.

To illustrate, in my own engagement with the corpus for lectures on the Green party for an introductory politics course, it was possible to write code that extracted the voting record of the Greens from the non-speech procedural data that was not used in the analysis in Chapter 5. At the time I conducted that analysis there was no feasible way to construct these voting records.

It is hoped that the availability of this corpus and the methods demonstrated in this research contribute to growing interest in corpora and corpus methods. During my research I have talked with other New Zealand researchers, including linguists, historians, and legal researchers, who see the potential of engaging with the parliamentary record in new ways not facilitated by the official online record. In particular, the NZPLC offers new research possibilities for the community of linguists interested in New Zealand. The New Zealand parliament represents an under-researched, interesting, and potentially influential setting for speakers of New Zealand English and a corpus like this facilitates a variety of linguistic investigations that transcend the debating chamber. Because we know a lot about the individual speakers and their backgrounds (e.g. their age or place of birth or gender), groups of speakers can be compared using these characteristics. Furthermore, because the rules and practices governing speech in parliament are known and relatively stable, this corpus could be used to study changes in language use over time.¹⁸²

There is a wide societal relevance to understand how MPs and parliamentary parties are using the forum that parliamentary representation allows them. The following portion of speech from Green MP Kevin Hague (2016) has an obvious relevance to the kind of analysis that I have undertaken in this research:

¹⁸² Given there are now audio-visual records of parliamentary debates there is also the possibility to use the parliamentary corpus in creative ways to conduct sociophonetic research on the changing New Zealand accent.

I was reminded of a Fairfax piece that I read recently about words used in this Prime Minister's state of the nation speeches. He has given eight of them so far, and in those state of the nation speeches he has used the word "economy" 94 times, he has used the word "growth" 63 times, and he has used the word "businesses" 54 times. In those eight speeches he has never used the word "poverty"; he has never used the phrase "climate change". The evidence is that this is a Government that does not care about poverty and does not care about climate change.

Hague refers to a media article on the prime minister's speech that appears to have counted words as a way to get at the kind of dominant ideas that the Green party problematises (Ford, 2015). Although corpus methods are more than counting words, this does indicate the public interest in analysis of what is said in parliament. The analysis being referred to by Hague is only related to a one-off speech and this word counting could easily be conducted with the online version of *Hansard*. What the NZPLC allows is to analyse the parliamentary record to detect specific patterns of use, like Hague is highlighting, in relation to pervasive patterns of use or temporal shifts in arguments. I suggest that this has wide relevance for representatives of political parties, political insiders, media, the public, and academic researchers.

7.3.2 Critical evaluation of the use of an audio corpus

An additional significant contribution of this thesis was the use of an untranscribed audio corpus for discourse-oriented analysis and documenting a process for retrieving many examples of use of a keyword and conducting analysis of patterns of use. As discussed in Chapter 6, Hanson-Easey and Augoustinos (2017) have recently highlighted the potential difficulty of getting at the content of talkback radio, indicating that this is a potential limitation of using talkback calls as a data source. The method I developed in Chapter 6 is a new way to address this problem. This has the potential for use for different kinds of discourse analysis, including critical discourse analysis and conversation analysis that orients to specific topics or the use of specific keywords.¹⁸³ It is also relevant for other kinds of corpus-assisted work, for example sociolinguistic work in the variationist tradition that focuses on comparisons of a specific language feature (for example, see: D'Arcy, 2014). In corpus work on discourse it is not common to see examples of work using audio corpora, and where an audio

¹⁸³ In the case where the research is qualitative and the problem is to locate a few relevant texts, the keyword spotting approach could be used and it would perhaps not require the extent of software infrastructure to code valid versus invalid keywords and transcribe all the texts.

corpus is used the norm is to transcribe all the audio. In this study I have, therefore, subverted the expectations set by text-based corpus analysis while remaining consistent with the idea of corpus as a collection of examples of language use that can be analysed with the aid of software tools. I have also described and demonstrated a probabilistic procedure to construct a concordance and demonstrated the possibilities of using this as a basis for quantitative analysis. I will now discuss issues with treating audio files as a corpus and the probabilistic concordancing process in turn.

The audio corpus as I am have conceived it here, with the collection of digital audio files themselves as the corpus, is different to a text corpus in a number of important ways. Firstly, we are not able to make the same kind of claims about it that would normally be made about a text corpus. For instance, we cannot make straightforward claims about how many words are contained in the corpus. Confident claims can be made about how much audio is contained in the corpus (i.e. how many minutes or hours), word counts can only be estimates based on different assumptions of speech rate or by sampling a selection of audio. Secondly, the audio corpus is much more opaque to analysis than a text corpus. So for instance, it is relatively straightforward with a text corpus to find the frequency of a word pair in a certain collocation span and to find the frequencies of each word outside of the span (or across the whole corpus), which is the kind of basic quantifications required to calculate specific measures of collocation, and to repeat this process to produce a list and rank the collocated words. This procedure is not at all straightforward with a corpus of audio files. This means that the kinds of analysis that can be conducted or the kinds of measures that can be used must change (for example, using frequency as a collocation measure or using keyness of a span against a reference corpus as I have done in this study).

In relation to the process of concordancing described, the approach described to index instances of a keyword is much more probabilistic than concordancing a text corpus and this is a characteristic of any analysis that relies on similar indexing processes. While a computer can find all instances of *economy* in a text corpus using a simple matching algorithm, any process that attempts to detect specific words from audio data cannot be exact. That is not to say that probabilistic processes are excluded from corpus linguistic investigations. For example, annotating a corpus with parts of

speech or semantic tags are probabilistic processes and are likely to be less reliable the more a text corpus deviates from the kinds of texts that were used to train the models (i.e. if the model is trained on written texts, parts of speech tagging is not likely to be as accurate on transcripts of spoken data) (for example, see discussion of accuracy rates for CLAWS tagger across different text types: Rayson, Archer, Baron, Culpeper, & Smith, 2007). However, thinking about this problem another way, it is perhaps possible to treat the probabilistic nature of the indexing process as a kind of sampling procedure.¹⁸⁴ This is a move from the representativeness of corpus to the representativeness of the sampled concordance. This necessitates that the researcher attends to whether this specific sampling process is likely to be problematic in answering their particular research questions or making more general claims from their findings. This might, for instance, require that the researcher investigates the speaker training data and the academic literature on whether there are deviations in the way specific speakers say a word or phrase that might systematically affect rates of detection in a way that is meaningful in responding to the research question.

In the case of this research, I did validate whether detection of *economy* was sensitive across a range of people with New Zealand accents or across audio recordings of varying quality (e.g. telephone quality versus studio quality). This was not crucial in terms of the arguments of the overall thesis as I was not attempting to make claims of representativeness, but to indicate regularities and variability. However, more work to understand the accuracy of the detection method would be useful to inform researchers about the accuracy of the claims that can be made about the contents of the corpus and to allow estimation of valid instances to analyse before the intensive process of manual coding.

To assess the relevance of this method it is important to consider the alternative.¹⁸⁵ It is possible to record some audio, transcribe it and conduct corpus research in the traditional manner.¹⁸⁶

¹⁸⁴ It should be noted, that the use of a sampled subset of concordance entries is not uncommon when dealing with large concordance results (Baker, 2014, p. 84; Also, see: Hunston, 2010).

¹⁸⁵ We must assume that if a corpus existed with the required kind of data that the researcher would use this and not bother to build a corpus. However, in the case of this study, even if there was a New Zealand corpus of talkback, without knowing the timing of calls the contextual analysis would not be possible.

¹⁸⁶ It might be possible to listen and manually log the timing of all instances of use of a word, but again this is time intensive and would require exceptional concentration. This would be impractical for a corpus of the size I

The usefulness of this approach would, to a large part, depend on our expectations or initial validations of the frequency with which the particular phenomena occurs and how much audio would need to be collected and transcribed. Although the coding and transcription time was significant for the audio concordancing process I undertook, transcribing a complete corpus is slow (estimates range drastically between 4 to 10 hours of transcribing time per hour of spoken discourse, see: Nagy & Sharma, 2013, p. 251). Furthermore, this strategy could be risky if the occurrence of a word were rare or frequent but unevenly distributed across time or speakers. To illustrate the riskiness of this method, the word *economy* is only mentioned once in the 251,677-word Australian Radio Talkback corpus. The time investment should be weighed against any other available ways to access the content of talkback (e.g. paying a media monitoring company, as discussed by: Hanson-Easey & Augoustinos, 2017). However, in some situations, there may be no practical alternatives, and this does demonstrate a way to engage with the content of large collections of audio.

The procedures I have mapped in this study hold potential for other researchers interested in research on the content of talkback radio or readily-available recordings of speech now publicly available (e.g. podcasts). Software-based methods of detecting speech in audio will continue to improve and the kind of processes I have described here will become something corpus linguists can more easily do. As in the case of text-based corpus analysis (for discussion of this, see: McCarthy & O'Keeffe, 2010, pp. 5-6), before the possibilities of these techniques can be realised, it is likely that there will need to be user-friendly software packages that facilitate this kind of analysis, including detection, validation and transcription. Much of the required technology has already emerged and as models trained on different language varieties become more readily available the ability to index keywords in audio will become much more accurate.¹⁸⁷ More generally, it is likely that there will be improvements in the accuracy and speed of automated speech-to-text transcription making the content within audio much more readily accessible. In addition, there will be other software tools that can add to the analytic capacity of researchers studying audio corpora and will allow new analytic procedures

built, because playing back 1788 hours is close to 45 40-hour weeks, but perhaps much more feasible if the audio corpus was short.

¹⁸⁷ There are profitable commercial drivers of speech detection technology for use in mobile phones, smart speakers, AI personal assistants, and other tools of a techno-surveillance dystopia.

and new avenues of research. Even before the tools and techniques are ready it will be possible to experiment and to begin thinking about the pitfalls and potential of new technologies, as well as the kind of research and the kind of claims such analysis will make possible.

7.4 Limitations and implications for future research

This research highlights and exemplifies the value of approaching the study of lay people's thinking about the economy in a way that: critically interrogates the assumptions underpinning the research; draws on relevant social scientific literature beyond the boundaries of economics and economic psychology; and attends to the public and political context of economic ideas. At this point I will discuss the limitations of this research and some potential directions for future research.

The thesis engaged with the work of economists and economic psychologists on lay economics from the perspective of critical political psychology and corpus linguistics and, as stated at the outset, was a cross-disciplinary and interdisciplinary kind of enquiry. As such, beyond core research related to the disciplines named (the literature on lay economics, Billig's work on rhetorical psychology and relevant work on corpus linguistics), to undertake this critical engagement I drew on a range of relevant scholarship from across the social sciences, including work on the philosophy and sociology of economics (Mäki, 1996; Lawson, 2005; Fourcade et al., 2015) and research on the emergence of the modern usage of *economy* in public discourse (Emmison, 1983; Hope, 1991; Mitchell, 2005). Although I attempted to historicise the research on lay economics and economics itself in relation to literature on post-politics (Rancière, 1999; Žižek, 1999; Mouffe, 2005; Crouch, 2004), I see the importance of engaging more deeply with the sociological and historical aspects of this in my future research by through work in economic sociology, political economy, the history of economics and science and technology studies as it relates to economics in the public sphere and contemporary economic ideas more generally. In addition, while the focus of the thesis was on lay economic knowledge, there is also scope to engage more deeply with the literature on expertise, for example the influential work of Abbott (1988) on the "system of professions", and particularly academic work that addresses the changing nature of economic expertise (including the work of

Fourcade, 2009; and Davies, 2014). Given the need to limit the scope of the research (see Section 1.4), especially perhaps in an interdisciplinary form of enquiry, I regretfully could not engage with these wider literatures and this is a limitation I am aware of. In developing this research in the future, I will develop the connections to and integrate insights from these literatures.

As stated at the outset of the thesis (see Section 1.4), the choice of studying the word *economy* was significant in reorienting to rhetoric that belongs to the economic domain but that demonstrates dimensions of lay people's economic thinking that previous research has tended to neglect by placing in the background. However, I also stated that the choice of studying the use of the word *economy* was likely to highlight qualities of lay people's thinking that would be different had I chosen other words. As has been discussed, the use of *economy* in parliament and on talk radio was closely associated with government and appeals to the welfare of the political community and, except on talkback calls, with economic growth. It is likely that studying the use of another word would highlight different qualities. For example, studying the use of *inequality* would be likely to highlight debates about wealth and income inequality, how it is justified, and so on. Studying the use of *economy* should clearly not be taken as an attempt to totalise economic thinking "in the wild". To provide a more complete picture, which is a worthwhile endeavour for future research, would require drawing on work on other specific features of economic discourse (for example, see: Rae & Drury, 1993; Hamilton et al., 2007) and conducting further studies of this kind.

As was discussed at length in Chapter 4 the kind of "in the wild" data that this thesis deals with is quite different than is typically used in research on lay people's economic thinking. As was explored in that chapter, studying what Furnham (1988, p. 221) calls the "self-presentation of lay theories" is criticisable according to the assumptions and standards of research that aspires to the ideal of a representative sample of individuals whose cognitions are accessible by self-report instruments (i.e. surveys or interviews). As Chapter 4 also discussed, the use of self-report instruments is criticisable based on challenging the *from the Academy* and *in the head* assumptions that are practical limitations that economists and economic psychologists have in accessing economic thinking in the way they conceive it. On its own terms however, we should carefully consider the kinds of claims we

can make about studying thinking “in the wild”. In both Chapter 5 and Chapter 6 I provided background on parliament and talk radio as sources of “in the wild” and their relevance and limitations for studying “lay theories”. It should be clear from these discussions that neither parliament or talk radio (or talkback calls specifically) can be taken as representative of some generalised “in the wild” (if there is such a thing). There are limitations of both data sources and the claims that can be made that these chapters discussed in the background to the studies (see Section 5.2 and Section 6.2). What the studies do provide is an insight into prominent, situated *economy*-talk and neglected or unrecognised aspects of economic thinking as a public and political kind of thinking. Using the two corpora we can also make better claims about economic discourse than cherry-picked examples of metaphors or other noticeable features of discourse and reveal the common-place and cumulative nature of economic ideas in their expression “in the wild”.

In comparing the two studies, there is a marked difference in the number of instances of use of *economy* analysed. In the study described in Chapter 6 there were 112 utterances identified that were used analysis from talkback calls (and 702 instances across talk radio). It would be a mistake to equate the number of instances of *economy* with the size of the corpus, which consisted of 1788 hours of talk radio broadcasts. There were more instances from talkback calls than was available from existing corpora that feature New Zealand speakers and, although the number of instances to analyse was less than hoped, there was enough data for analysis. Building the specialist corpus for the talkback study allowed me to study public discourse that was temporally aligned with the period covered by the parliamentary corpus and to therefore contextualise speech on talkback against a much longer sample of public political rhetoric as well as the specific debates occurring at the time.

As discussed in the previous section on evaluating the use of the audio corpus, there are differences in the kinds of claims that can be made about an audio corpus when compared to a text corpus that should be understood as limitations of the talkback study. Because interrogating the audio corpus relies on mechanisms that are probabilistic in nature, it is only possible to make probabilistic claims about the audio corpus data. Although there is no reason to expect that errors in detection would be biased in a way that would privilege particular ways of using *economy* over others, to

improve researchers' confidence about the claims that can be made about the contents of an audio corpus, more work is warranted to estimate the accuracy of the probabilistic keyword detection method using a range of audio and speakers.

There are some key ways that this research could be developed in the future. Most importantly, there is scope to apply the methods used here to study public thinking in relation to phenomena associated with economics. Because the research indicated a disconnect between the way people on talkback calls and politicians represented *economy* in relation to the key concept of growth, it would be useful to study whether speakers in the same period were orienting to *growth* without *economy* to strengthen this claim. I also suggest there would be value in surveying media representations of the economy in a more systematic way to understand who is using *economy* in various media and why. For research aiming to interrogate people's thinking more generally, this research indicates the value of engaging with public rhetoric using corpora.

I am not expecting the economists and economic psychologists who research lay people's economic thinking to drop their assumptions or change the way they go about their research. However, I suggest there is value in these researchers considering what their assumptions might mean for the research they are conducting. The findings of this research offer some new ways to think about lay people's economics. In addition, given that there are claims in the literature about features of public discourse and what it consists of and how it relates to thinking, this research can inform the claims they make about public discourse. For economists and psychologists working in this area, I have some simple recommendation for their research: to explicitly acknowledge and discuss key political debates that might relate to their findings; to think carefully about the conclusions they are drawing from differences with economists or deviations from orthodox economic knowledge; and to be more reflective regarding the political project underpinning their research.

Given this research attempted to move away from economists as a reference point, there is space to return the focus to the ideas of economists and their thinking in relation to the insights from this research. Most obviously, there is potential to conduct comparable research, perhaps using a

corpus of economists' public utterances, to understand their public use of the economy in relation to the studies conducted in this thesis. Furthermore, given the political nature of claims about expertise, there is merit for future research to consider the politics, history and institutional dynamics that have shaped and continue to shape research agendas of economists and others who are orienting to lay people and the specific political functions they serve. There is also potential to engage with economists and their "lay people" and the rhetorical function "lay people" serve, especially in the writings of prominent economists in the public sphere. This could indicate new ways to think about economic expertise and the wider politics of economic expertise.

With respect to the use of *economy* in parliament, there would also be value in conducting comparable research using corpora for other national parliaments, particularly to confirm how dominant the growth assumption is internationally. In addition, the analysis focused on the transition from a Labour-led to a National government and ended analysis in 2016 and since then, in 2017, there was a change of government: a coalition of Labour and New Zealand First supported by the Greens. The new government has promised a new economic agenda. It would be interesting to examine how the changes promised by the new government are being represented in parliament in their use of *economy*.

Also, in relation to use of *economy*, with the recent availability of digitised volumes of historic *Hansard* it would be possible to interrogate the emergence of modern forms of usage of *economy* in the New Zealand parliament. The previous research highlighted in Chapter 3 (Emmison, 1983; Hope, 1991; Mitchell, 2005) did not apply corpus methods and there is obvious potential to use corpus methods to understand the changing usage of *economy*, but also, as previous research has done so effectively, to understand how this interacts with changes in dominant economic ideas. I have already begun piloting a study using budget speeches and I plan to continue this after my PhD research to understand both the emergence of the modern use of *economy* and also key points of change, not least the election of the fourth Labour government in 1984.

There is a wider research agenda that is facilitated by the NZPLC, which was indicated in Chapter 5 and discussed in Section 7.3.1. In Section 7.3.1 I discussed how the parliamentary corpus itself is a significant contribution to the research community and indicated who could make use of this and the kind of research that it makes possible. As indicated there, I intend to develop this as a public resource for researchers and the public. I will briefly sketch key research related to the NZPLC that would add to our understanding of parliament and parliamentary speech.

Analysis in Chapter 5 indicated the importance of the role of speakers (e.g. backbench government MP versus cabinet minister versus opposition spokesperson) and their characteristics (e.g. gender) to understand the interplay between characteristics of speakers and what speakers are saying. There is wider societal importance to this analysis. For example, it was pointed out in Chapter 5 that there were a set of family-type words overrepresented for female speakers and finance-type words overrepresented for male speakers. In addition to this content difference that indicates speakers' roles are mirroring traditional gender roles, I have also begun analysis on whether increased parliamentary representation for women is reflected in an increase in their share of speaking time. There is an obvious difference between being elected to "have a voice" in parliament and being provided an opportunity to use that voice. This issue is also relevant in relation to representation of Māori in parliament and whether this is being reflected in more opportunities to speak and more use of Te Reo Māori.

In Chapter 5 I discussed issues related to the parliamentary record itself and how spoken utterances are edited for a written account of proceedings. Although there has been research on the UK parliament on transcription practices and differences between the actual speech in parliament and the transcripts of these speech (Slembrouck, 1992; Mollin, 2007), most of what is currently known about *Hansard* is what is represented on the parliamentary website. My validation of the keyword detection method in Chapter 6 using parliamentary speeches provided some indication of the accuracy of transcriptions of speech in parliament, but this deserves more attention. There is potential to replicate Mollin (2007) on New Zealand's parliamentary proceedings. Mollin writes about the "Hansard hazard", which is a warning to linguists to recognise that *Hansard* transcripts are not

orthographic transcripts. Given transcription practices are likely to differ between parliaments, a replication of this research, perhaps enhanced by interviewing the *Hansard* transcribers and editors to help understand the results, would provide a clearer indication of the kinds of claims that researchers can make about the official transcripts.

Further in relation to parliament, there was evidence in Chapter 6 that parliamentary speech was being rebroadcast on talk radio. In Chapter 5 I made claims that politicians are orienting to this wider context and speak with an awareness that the potential audience for their speech is much larger than the debating chamber itself. Additional research is warranted on whether or how MPs are explicitly orienting their speeches to the audience outside parliament. Addressing this would also require studying how, when and why media represents parliament and parliamentary speech, as well as whose speech is being represented.

This research has also articulated ways to build talkback radio corpora and audio corpora more generally and ways to analyse them. As discussed in Section 7.3.2, this facilitates new kinds of research on talkback radio. Talkback radio was a fascinating setting to study. As a potentially influential public forum for political debate in New Zealand, it deserves further attention. Although the study of talkback radio in Chapter 6 does not address the kind of research agenda discussed by McMillan (2005), I have indicated a practical way for discourse-oriented researchers to engage with the content of talkback calls. I echo McMillan's call for researchers to study the content of talkback in New Zealand.

7.5 Rethinking lay people's theories is rethinking economics: repopulating the economy

In situating this research, in Chapter 1 (see Section 1.2), I pointed to the public context of this research. Firstly, in the aftermath of the financial crisis there was noticeable questioning and criticism of economists and dominant economic ideas. Secondly, there has been prominent public attention to the disconnect between economists and citizens in relation to contemporary political events, most noticeably in relation to the Brexit referendum in the United Kingdom. This public context is still very

relevant. It appears there is still debate about gaps between lay people's thinking and economic expertise and interest in how lay people's thinking relates to new thinking on what constitutes a good economy.

To address the wider implications of this research I will connect my findings to three recent public interventions. In February 2018 a group of think-tanks released a report on "Framing the Economy" (NEON, NEF, FrameWorks Institute, & PIRC, 2018).¹⁸⁸ The report provides recommendations for progressives communicating or "framing" new economic thinking. Their recommendations are grounded in their research on what the British public already thinks about the economy. An appreciation for how people already think about the economy, which this thesis contributes to, is argued in the report to be important in attempting to communicate persuasively for new economic thinking. Like this thesis, the researchers did not orient to economics and economists' ideas. In their research, the lens was derived from their research on the economic ideas of progressive groups who are the intended audience of the report. Their report described findings from a series of interviews with members of the public and they structure their results around "key cultural models" (p. 12). Their research indicates a breadth of rich insights on lay people's thinking that scholars should engage more fully with. Some of their findings are consistent with the findings of this thesis, including the problematic nature of the economy and the appeals to nation and government.

Interestingly, although primarily focused on metaphors underpinning people's thinking, their interview research did not identify the growth metaphor as significant. Their report does not comment explicitly on this absence. However, this thesis, which demonstrates this disconnect between political rhetoric and lay people's rhetoric in relation to the growth assumption, indicates the importance of this absence. Interestingly, that their report does not find growth as a key metaphorical understanding of the economy is potentially inconsistent with theoretical underpinnings of the framing approach. Although not explicitly cited, this approach draws on ideas on political messaging popularised by George Lakoff (2004) based on Lakoff's previous theoretical work on conceptual metaphor (Lakoff &

¹⁸⁸ For an earlier "Framing the Economy" report released by the New Economics Foundation, one of the organisations producing the 2018 report, see Afoko and Vockins (2013).

Johnson, 2003).¹⁸⁹ Lakoff's framing of framing posits the monolithic quality of repeated public use of metaphors to shape thinking. That politicians use *economy* and growth-words so often, at least in the New Zealand context, would suggest that this should be a dominant feature of lay people's thinking. That this thesis provides indications that in the New Zealand context this was not the case should be hopeful for anyone communicating for transformational change.¹⁹⁰

The findings of this thesis regarding the predominance of the growth assumption in the thinking of the major parties, informs current debates about dominant economic ideas. To illustrate this, a panel discussion first broadcast on the BBC World Service (2017) in November 2017 debated the question: "Do We Need Economic Growth?". One of the panellists, Daniel Ben-Ami took issue with the arguments of Tim Jackson (author of "Prosperity without Growth", see: T. Jackson, 2009) and Annie Quick (New Economics Foundation), who were both critical of growth. Ben-Ami claimed:

We can debate our preferences in relation to economic growth, but it's simply not true to say that politicians in the west or across the world, make GDP th- or economic growth their overriding priority.

Ben-Ami went on to recommend that listeners could confirm his claim themselves by reading online texts of international institutions and national governments. This thesis, by analysing a large corpus based on the online proceedings of New Zealand's parliament, sheds light on this claim. Politicians from New Zealand's two major political parties, demonstrably and overwhelmingly made economic growth their rhetorical priority in relation to the economy, reinforcing key assumptions that: the economy should grow, and government should encourage growth. Therefore, Ben-Ami's claim can be rephrased: it simply is true to say, at least in the New Zealand political context, that politicians have in recent years represented economic growth as their overriding priority in relation to the economy. Quantifying the pervasiveness of this assumption bolsters the arguments of scholars and activists who problematise the dominance of growth in contemporary political thinking.

¹⁸⁹ A previous "Framing the Economy" report by the New Economics Foundation (Afoko & Vockins, 2013), one of the organisations producing NEON et al. (2018), explicitly discusses Lakoff's ideas.

¹⁹⁰ This also suggests that there should be some scepticism about some of the claims of this approach. An over-emphasis on metaphor, at least when compared with the classical writings on rhetoric authored by practitioners over two thousand years ago, could constitute a deficient rhetoric.

A second relevant public intervention occurred in March 2018, when the Bank of England indicated that the Bank would be formalising ways to engage more meaningfully with the public on economic matters (Haldane, 2018). This was a direct result of the RSA's promotion of debate on the role of citizens and economists in economic decision-making and their trial of a Citizens' Economic Council, an initiative inspired by the Brexit vote (RSA, 2018). The speech which announced the Bank's move, by Bank of England Chief Economist Andrew Haldane (2018), was titled "Climbing the Public Engagement Ladder".¹⁹¹ This decision by the Bank to engage with citizens appears encouraging.

It is revealing, however, that when Haldane (2018, p. 2) rationalised action for more engagement with the public, he did so in relation to "twin deficits":

So what could we hope to achieve by increasing citizens' engagement with issues of economics and finance? My short answer to that question is a great deal. Economics, and economic policy, faces a "twin deficits" problem – a deficit of public understanding and a deficit of public trust. Twin deficits, be they fiscal and external or trust and understanding, carry dangers for the economy and for economic policy. Closing them would, I believe, deliver significant benefits to society, to individuals and to policymakers who sit twixt the two.

I must admit, that when I watched a video of this speech and heard Haldane say, "twin deficits", I was expecting something other than a restatement of the problem of public misunderstanding of economics. I was expecting that one of these "twin deficits" would be economists' deficient appreciation of the value of listening to lay people and lay people's thinking about the economy. Haldane is an economist who is publicly engaged, who acknowledges his own lack of understanding of people's lived experiences (pp. 8-9), and indicates a resolve to address this. That he still frames the argument as a problem of public ignorance indicates that economists still need to reflect on the deficit of their own expertise.

This thesis indicates that there is value in questioning disciplinary assumptions about lay people and their lack of economics. That citizens perhaps cannot define GDP or do not know the GDP growth rate or cannot recite a central banker's rationale for independent central banking, could

¹⁹¹ The speech referred to "A Ladder of Citizen Participation" by Sherry Arnstein (1969).

perhaps be cause for self-reflection about disciplinary knowledge, the kind of politics embedded within it, and the kinds of politics this reproduces. Clearly, the people featured in this thesis indicated understanding and could think about the economy: they were engaging with current political debates related to the economy, were articulating their concerns about the current economy, and were arguing for change. There is critical and imaginative potential for economic thinking in inverting the expertise gap and asking the question: what do lay people know that economists do not?

Because many of Michael Billig's ideas have accompanied me on this research journey, it seems fitting at this point to conclude the thesis by borrowing one final insight. Billig (1994, p. 309) suggests that the way much social psychological research is reported is "depopulated", "devoid of individual characters". This thesis has demonstrated that although the economy is pervasive in our politics, there is richness in the way people use it. This is not to glorify ignorance, but to point out that economists and politicians should engage more meaningfully with the richness of lay people's thinking. The economy in the imaginations of economists appears shallow, full of indicators, but not much else. I suggest that economists need to address the depopulated nature of their economy. The danger of not addressing this is expressed by John Lanchester (2016) in his reflection on the Brexit result:

One of the things you notice, travelling around the country talking to people about economics, is that young people in particular feel they are living in an economic system rather than a political one. They think about jobs and paying the rent and whether they will ever own a home and, increasingly, about student debt, and they don't see politics as having anything to say to them about those issues. That's because the economics are the same irrespective of which political party is in charge. This is one of the reasons the Remain campaign failed to win the argument. Making economic arguments to voters who feel oppressed by economics is risky: they're quite likely to tell you to go fuck yourself.

This indicates that there is potential for "antagonism" to be manifest as outright conflict when people are on the receiving end of ongoing economic arguments that deny them their grievances (Mouffe, 2005). Economists and economic psychologists would do well to engage with these issues: populating their economy with these living, thinking, arguing, swearing people would be a good start.

Appendix A: Building the New Zealand Parliamentary Language Corpus (NZPLC)

Early in the process of this thesis research I became interested in the potential of developing a corpus based on the *New Zealand Parliamentary Debates* as a way to study the rhetoric of MPs related to the economy. Figure A1 shows a set of physical volumes. The online version available on the New Zealand parliamentary website was very interesting. As a software developer with over a decade of experience building web-based applications prior to my PhD, I had been thinking about the potential of a data-set based on the official parliamentary records available online. The online version that was available at the time was frustrating and slow to use and would not allow the kind of reporting that the research I was interested in conducting might require. I became aware of corpus linguistics around this time and the potential of corpus analysis. This was (and is still) not able to be performed using the online version of the parliamentary debates. This required building a corpus.



Figure A1 Photo of physical volumes of *New Zealand Parliamentary Debates* (or *Hansard*) held in the Department of Political Science and International Relations at the University of Canterbury

The software to build the NZPLC and to browse and analyse it is a web-based application utilising an AMP stack. An AMP stack is a common set of software used for web-based applications based on the web server Apache, the open source relational database MySQL, and the programming language PHP.¹⁹² The web-based application, both to build the corpus and to browse and analyse the corpus, runs on a web server on my laptop. An initial block of coding work was done in August and September in 2013, this included writing a system to download and process the debates from the parliamentary website and to develop a basic interface for browsing the data. This resulted in a first version of the corpus with 10 years of parliamentary debates which was both a proof of concept and a set of data to use to develop the analytic tools and analytic techniques further. In 2014 and 2015 I implemented various reports and statistical measures used in corpus analysis and a faster n-gram based index for the whole corpus. This allowed very fast searches and reporting (both to build concordances and run quantitative analysis). In May 2016 I updated the content of the corpus up to the end of March 2016 to coincide with the end of the period used for the talkback study reported in Chapter 6.

Figure A2 shows a data-flow diagram that describes the process of turning the online parliamentary debates into a corpus based on a structured database. The remainder of this appendix will briefly describe the process depicted in Figure A2 and will provide more information about the reporting and analysis capabilities of the software browser tool, *New Zealand Political Language Browser (v2-2016)*.

¹⁹² The specific AMP stacks used on my Windows laptop is AMPSS (version 3.7) and this runs a private web server accessible only via my laptop for development and analysis. AMP setups are cross-platform meaning it could be deployed on a public web server with the necessary processing and space requirements. PHP is an open source programming language primarily used for building web-based application. PHP version 5.5.38 and prior versions were used in development and analysis. MySQL is an open source relational database and version 5.6.35 and prior versions were used in development. Apache is a web server and version 2.4.25 and prior versions were used.

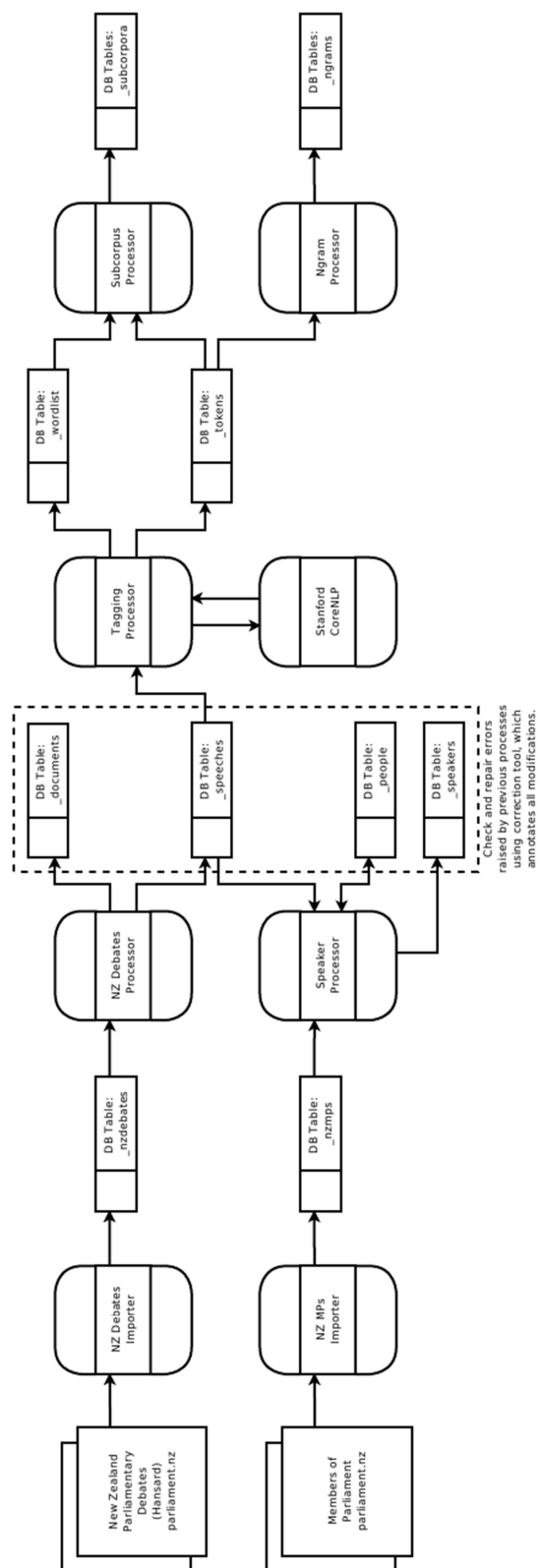


Figure A2 Data flow diagram for building the NZPLC based on the *New Zealand Parliamentary Debates* 2003-2016

Figure A3 shows a screenshot of the online parliamentary debates on the left. On the right it shows the related HTML markup that the web browser uses to represent the page to website visitors. As can be seen in the screenshot on the left, the debates were displayed as a sequence of speaker utterances. Speakers were indicated with their party, electorate and relevant ministerial positions the first time their speech is depicted in a debate transcript, with subsequent utterances typically just featuring their name. The transcripts also contain non-speech related text. For example, in this case, there is text describing the process and results of a vote.

constitutionally important powers sparingly, only in extreme circumstances Navy into the private security company for the Anadarko Petroleum Company. I know that you all read the Green Party blog, Frogblog, and what I have Hon Maurice Williamson: You have got to be joking. GARETH HUGHES: Parliament's IT expert, Mr Williamson, is not a reader of Frogblog. Andrew Little: I thought everybody read it. GARETH HUGHES: Yes, apparently, no one reads it. Not many people read it. I put up a blog there where I posted my proposal. I am going to take it to the House and introduce it and support what David McGee recommended to the Star Chamber, the District Law Society, which is that we should actually have a New Zealand Bill of Rights Act overview over substantive Supplementary Order Papers. I think it is important. We have, obviously, powers without the controls that you have in other overseas legislatures. The New Zealand Bill of Rights Act overview over substantive Supplementary Order Papers. I think it would be a positive step. We want to see lawmaking and, worse, legislation passing. We want to see lawmaking that reflects the Zealanders demand of this House. Kia ora. JONATHAN YOUNG (National—New Plymouth): I move, <i>That the question be now put.</i> A party vote was called for on the question, <i>That the question be now put.</i> Ayes 61 New Zealand National 59; ACT New Zealand 1; United Future 1 Noes 59 New Zealand Labour 34; Green Party 14; New Zealand First 10; Māori Party 2; Mana 1; Independent: Horan. Motion agreed to.	<pre>: It is customary to come up with a proposal. I know that you all read the Green Party blog, Frogblog, and what I have <p class="a">What we see here is a Minister who has been in the morning. The Supplement in the morning. The Supplement <p class="a">The Government would have liked to see <p class="a">Another bill that I saw raced through <p class="a">I call this bill the "Crown Minerals <p class="a">This legislation contains arrest and <p class="a">I know that you all read the Green Party <p class="Interjection"> Hon Maurice Williamson: You have <p class="ContinueSpeech"> GARETH HUGHES: Parliament's IT <p class="Interjection"> Andrew Little: I thought every <p class="ContinueSpeech"> GARETH HUGHES: Yes, apparently </div> <div class="Speech"> <p class="Speech"> JONATHAN YOUNG (National—New Plymouth) : I move, the question be now put .</div> <div class="partyVote"> <table class="table vote"> <caption> <p>A party vote was called for on the question the question be now put.</p> </caption> <colgroup><col width="" ></col><col width="" ></col> <tr> <td class="VoteCount">Ayes <td class="VoteText">New Zealand National</pre>
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Figure A3 A portion of the online *New Zealand Parliamentary Debates*, with (left) the speech of the debate that website visitors see and (right) the HTML markup for this section of debate

Viewing the HTML indicated that the transcripts were semi-structured and reasonably consistent in format and potentially conducive to parsing using a software-based process to build a structured data-set. The markup for a debate transcript contained meta-data related to the debate itself and data related to each utterance that was not visible when viewing the transcript online. For example, there was timing information and markup that indicated the content of a particular HTML

tag (e.g. “Speech”, “Interjection”, “partyVote”). Again, this was not always consistent. These are problems that were accounted for in the process of building the corpus.

As Figure A2 indicates the first step in the process was to write an importer that automatically downloaded each available parliamentary debate back to 2003 when the online record started. The raw debates were stored in a database table with a row for each debate. A related importer downloaded information on MPs available on the parliamentary website and stored this in a database table.

The NZ Debates Processor processed the raw debates. It extracted and stored debate-related data. This process also cut the transcripts of running speech interactions and procedural comments into separate speaker chunks and non-speech chunks. This was done by processing the HTML markup and the use of regular expressions. This was not a trivial task and it required repeated testing to work out quirks and inconsistencies in the markup of the online record to accurately process the data. The Speaker Processor was then run on all the individual speech data and this detected who the speaker was in each speech chunk and annotated this with the speaker name, gender, and political party. After these two processes there were four key tables with structured data about the parliamentary record:

1. `_documents` contained debate level meta-data (e.g. the debate name and original URL).
2. `_speeches` contained the individual speech as text and HTML and any other data related to the utterance that could be derived from the markup (e.g. the timing).
3. `_people` was a table that structured data about each speaker (e.g. name and party).
4. `_speakers` was a lookup table that contained the original speaker text from the debate but also associations with `_people` and `_speeches`. The `_speakers` table included the political party of the speaker at the time of the utterance.¹⁹³

At this point, there were a number of errors that the software had been written to detect about the debate or utterance data. For example, if a speaker could not be detected an error was raised. A correction tool allowed manual correction of any inconsistencies in the data. For example, in a few

¹⁹³ Note that Speaker Processor had to account for instances where speakers changed political parties.

cases the markup for the speaker name in the parliamentary record was not correct and the text did not contain a “:” symbol.¹⁹⁴ The correction tool annotated any data that was manually corrected. At this point I randomly selected 500 utterances and made sure the text and speaker data was accurate against the original parliamentary record and it was. An important point to be made here is that in constructing a corpus we can embed the bugs that the original system has. This necessitates the need for data checks and decisions by the researcher on how to handle these, especially given the online *Hansard* is “official”. This was the basis for ensuring all corrections were annotated for future interrogation if necessary.

Next the speech data was processed using the “The Stanford CoreNLP Natural Language Processing Toolkit” (Manning et al., 2014). This process tokenised the speeches and assigned parts of speech tags and lemmas to each token. This data was stored in a separate `_tokens` table. This process also created entries for each distinct token in the corpus with a count of the total instances of use stored in the `_wordlist` table.

The data in the corpus was subject to two further processes at this point. Firstly, the Ngram processor derived 4-grams for every separate utterance in the corpus. This was the basis for an index for very fast searching based on keywords or phrases and this also provides the basis for most of the reporting and analysis (e.g. constructing concordances and collocation measures). Secondly, subcorpus lookups were created based on political parties and parliamentary terms and other criteria.

A limitation of the corpus analysis software that I evaluated early in the project was the lack of ability to handle lots of data efficiently or affordably or to run custom reports or implement new measures. I decided early on that a custom browsing and analysis tool was required. The custom nature of the software tool I developed meant that the analysis was not restricted by the choice of tool and I could implement the specific measures of collocation (e.g. LogDice) and keyness (e.g. Log

¹⁹⁴ Other errors encountered with the online Hansard include: the running together of words in Te Reo introduced by their system in the process of changing “subject to correction” to a finalised version; there were markup errors (e.g. missing “:”, errors of text in denoting the speaker roles); and duplicate documents with different names.

Ratio). This was crucial to being able to create the custom reporting necessary for the key collocates analysis discussed in Chapter 5.

Figure A4 shows the basic browsing interface of the *New Zealand Political Language Browser (v2-2016)*. A key design consideration in relation to the browser tool was to be able to move between levels of analysis (see Chapter 4). The browser tool provides easy access to concordances via a search box or by highlighting text within an utterance. The search interface is essentially a concordance based on a concordance KWIC view. Any concordance row can be clicked to see other complete utterances. Each utterance can be viewed in its interactional context by clicking the “[expand +]” link (see Figure A5). The “[review +]” link provided access to the raw record as downloaded from the parliamentary website with the URL.

The screenshot displays the 'New Zealand Political Language Browser' interface. On the left, a text excerpt from a 'Budget Debate' dated May 17th, 2007, is shown. The text discusses economic issues, mentioning 'growing economy' and 'growing wages'. On the right, a concordance table is visible, listing various utterances with their dates, speakers, and the context of the keyword 'growing economy'.

New Zealand Political Language Browser
home, import, process, export, reports/utilities

Budget Debate
May 17th, 2007 [review +][expand +]
[Volume:639;Page:9353]

Rt Hon HELEN CLARK:
It was in the 1960s with "Kiwi Keith", not with "Money trader John".

There is the \$650 million rail infrastructure package, and there is the \$3.2 billion KiwiSaver package. That package is good for our families, and it is good for the economy. It helps our families save for greater security in retirement, it boosts our nation's savings rates, it makes us less dependent on foreign capital, and it gives us greater control over our own destiny. It is good all round.

It is good especially because it gives Kiwis an economic dividend from the **growing economy** without throwing fuel on the flames of the domestic economy. Members should make no mistake: the National Party approach outlined by Mr Key would see every family's mortgage go up, every business's mortgage go up, and the currency go up, and it would make the imbalances in the economy worse, not better. So this Government has set out to do what is right for New Zealand.

We believe that the corporate tax rate cut will help our businesses invest for the future. We believe that the new tax credit for research and development will support our businesses and industries in going unmarket. We also have more funding in this Budget for Government

Concordance
[Build complete: 406/406] Sort: [Date] [Party] [Speaker] [Left] [Right]

Date	Party	Speaker	Context
17/05/07	labour	Helen Clark	an economic dividend growing from the economy without throwing fuel on the
17/05/07	labour	Michael Cullen	He said we want a growing economy but we should not be
13/09/07	labour	Shane Jones	nation State situation growing without a economy -- and economies can not
19/03/08	labour	Darien Fenton	in the benefits of a growing economy . It is not about
24/06/08	labour	Mark Gosche	there . We have a growing economy . We are up against
27/05/08	labour	Rick Barker	sharing the gains of a growing economy . The first tranche of
27/05/08	labour	Rick Barker	. That has meant a growing economy of that has delivered thousands
09/12/08	labour	David Parker	we need to fund our growing economy . Research and development expenditure
24/08/10	labour	Lynne Pillay	having growing wages , growing economy , and fair wages and
30/06/10	labour	Nanaia Mahuta	would be a productive growing economy and economy that created jobs , jobs
09/08/11	labour	Shane Jones	are looking for : a growing economy , I say to the

Figure A4 Basic browsing interface of the New Zealand Political Language Browser

A more comprehensive concordancing tool was included to allow better sorting and to restrict results further by a required context word and/or a specific subcorpus. This meant in the case of the key collocates analysis that I could concordance each party's use of a keyword or phrase in a specific parliamentary term to understand the regularities. This tool still allowed navigation to the browsing interface.

the business tax reform and assistance package of \$3.4 billion promoting investment, research and development, and upskilling and exporting. There was a party over there on the Opposition benches that used to say it was the party of business. When did its members last deliver a business tax cut? It was not in living memory—not in living memory.

Hon Member:
1960s!

Rt Hon HELEN CLARK:
It was in the 1960s with “Kiwi Keith”, not with “Money trader John”.

There is the \$650 million rail infrastructure package, and there is the \$3.2 billion KiwiSaver package. That package is good for our families, and it is good for the economy. It helps our families save for greater security in retirement, it boosts our nation’s savings rates, it makes us less dependent on foreign capital, and it gives us greater control over our own destiny. It is good all round.

It is good especially because it gives Kiwis an economic dividend from the **growing economy** without throwing fuel on the flames of the domestic economy. Members should make no mistake: the National Party approach outlined by Mr Key would see every family’s mortgage go up, every business’s mortgage go up, and the currency go up, and it would make the imbalances in the economy worse, not better. So this Government has set out to do what is right for New Zealand.

We believe that the corporate tax rate cut will help our businesses invest for the future. We believe that the new tax credit for research and development will support our businesses and industries in going upmarket. We also have more funding in this Budget for Government grants for science and research—a lot of it directly helping our businesses and industries.

Concordance [Build complete: 406/406] Sort: [Date] [Party] [Speaker] [Left] [Right]

DATE	PARTY	SPEAKER	TEXT	CONCORDANCE
17/05/07	labour	Helen Clark	an economic dividend growing from the economy	without throwing fuel on the
17/05/07	labour	Michael Cullen	He said we want a growing economy	but we should not be
13/09/07	labour	Shane Jones	nation State situation growing without a economy	-- and economies can not
19/03/08	labour	Darien Fenton	in the benefits of a growing economy	. It is not about
24/06/08	labour	Mark Gosche	there . We have a growing economy	. We are up against
27/05/08	labour	Rick Barker	sharing the gains of a growing economy	. The first tranche of
27/05/08	labour	Rick Barker	. That has meant a growing economy	that has delivered thousands of
09/12/08	labour	David Parker	we need to fund our growing economy	. Research and development expenditure
24/08/10	labour	Lynne Pillay	having growing wages , growing a economy	, and fair wages and
30/06/10	labour	Nanaia Mahuta	would be a productive growing and economy	that created jobs , jobs
09/08/11	labour	Shane Jones	are looking for : a growing economy	. I say to the

Figure A5 Browser tool with expanded view that shows other utterances within a debate for context

I implemented a number of reports to perform common kinds of corpus quantitative analysis, including: frequency lists, collocation reports, ngrams, keyness between subcorpora, and keyness by word or ngram (showing use in each subcorpus). Some of these reports were intensive to run and a caching system stored each report after it was created so that these rendered instantly when the reports were run again.

This appendix is a brief description of the process to build the corpus. I have also described the software tool written to browse and analyse the corpus. This reflects significant work undertaken during this thesis. As discussed in Chapter 7, the intention is to develop the corpus and browser tool as a public resource to allow researchers and members of the public to engage with the parliamentary record.

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